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                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
         JAN 08
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         JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
NEWS
         JAN 16
                 IPC version 2007.01 thesaurus available on STN
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
NEWS. 5
         JAN 16
NEWS
         JAN 22
                 CA/CAplus updated with revised CAS roles
NEWS
         JAN 22
                 CA/CAplus enhanced with patent applications from India
NEWS
         JAN 29
                 PHAR reloaded with new search and display fields
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         JAN 29
                 CAS Registry Number crossover limit increased to 300,000 in
                 multiple databases
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 10
         FEB 15
NEWS 11
         FEB 15
                 RUSSIAPAT enhanced with pre-1994 records
                 KOREAPAT enhanced with IPC 8 features and functionality
NEWS 12
         FEB 23
NEWS 13
         FEB 26
                 MEDLINE reloaded with enhancements
                 EMBASE enhanced with Clinical Trial Number field
NEWS 14
         FEB 26
NEWS 15
         FEB 26
                 TOXCENTER enhanced with reloaded MEDLINE
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 16
         FEB 26
NEWS 17
         FEB 26
                 CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
NEWS 18
        MAR 15
                 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19
        MAR 16
                 CASREACT coverage extended
NEWS 20
        MAR 20
                 MARPAT now updated daily
NEWS 21
        MAR 22
                 LWPI reloaded
NEWS 22
        MAR 30
                 RDISCLOSURE reloaded with enhancements
        MAR 30 INPADOCDB will replace INPADOC on STN
NEWS 23
NEWS 24
        APR 02
                 JICST-EPLUS removed from database clusters and STN
```

NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.

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SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 16 APR 2007 HIGHEST RN 930395-50-9 DICTIONARY FILE UPDATES: 16 APR 2007 HIGHEST RN 930395-50-9

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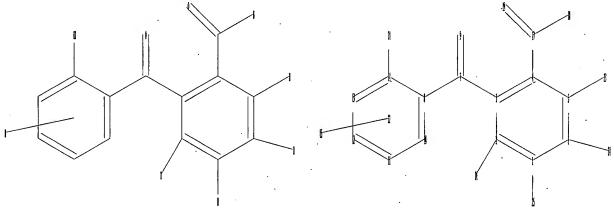
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http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10537940\april 1.str



chain nodes :

7 9 17 19 21 23 24 25 26

ring nodes :

1 2 3 4 5 6 8 10 11 12 13 14

ring/chain nodes :

15 18

chain bonds :

1-25 2-26 3-7 4-17 5-23 6-24 7-8 7-9 14-21 17-18 17-19

ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14 exact/norm bonds:
7-9 14-21 17-18 17-19 exact bonds:
1-25 2-26 3-7 4-17 5-23 6-24 7-8 normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14 isolated ring systems: containing 1:8:

G1:0, N

=> d

G1 O, N

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 17:CLASS 18:CLASS 19:CLASS 21:CLASS 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS

L1 STRUCTURE UPLOADED

L1 HAS NO ANSWERS
L1 OH OH H

x = chain fring

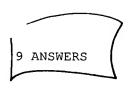
A = N

Structure attributes must be viewed using STN Express query preparation.

=> s l1 full
FULL SEARCH INITIATED 11:11:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 555 TO ITERATE

100.0% PROCESSED 555 ITERATIONS
SEARCH TIME: 00.00.01

L2 9 SEA SSS FUL L1



=> fil caplus COST IN U.S. DOLLARS

SINCE FILE ENTRY TOTAL SESSION

172.31

FULL ESTIMATED COST

172.10

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=> d ibib abs hitstr 1-5

L3 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:676200 CAPLUS DOCUMENT NUMBER: 146:168787 Use of amino hydroxy benzopho Use of amino hydroxy benzophenone derivatives for protecting human hair and skin AUTHOR(S): CORPORATE SOURCE: SOURCE: Anon. IP.com Journal (2006), 6(6A), 14 (No. IP.COM000136730D), 30 May 2006 CODEN: IJPOBX; ISSN: 1533-0001 PUBLISHER: DOCUMENT TYPE: IP.com, Inc. Journal; Patent LANGUAGE: PATENT INFORMATION: English

PATENT NO. KIND DATE APPLICATION NO IP 136730D 20060530
PRIORITY APPLN. INFO.: IP 2006-136730D
AB Disclosed are specific micronized organic UV absorbers 20060530 from the class of the

benzophenone derivs. which are useful for protecting human hair and skin against UV radiation and skin aging and preventing tanning. A further subject of the disclosure are cosmetic or dermatol. compns. comprising these UV absorbers. 919803-06-8
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) {amino hydroxy benzophenone derivs. for protecting human hair and

) 919803-06-8 CAPLUS Methanone, 1,1'-(1,4-piperazinediyl)bis{1-[2-[4-(diethylamino)-2-hydroxybenzoyl]phenyl]- (CA INDEX NAME)

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Described are aminohydroxybenzophenonecarboxamide derivs. of formula [1] [wherein R1, R2 = independently C1-20 alkyl, C2-20 alkenyl, C3-10 cycloalkyl, C3-10 C3-20 Renyl por R1 and R2 together with the linking nitrogen atom form a 5- or 6-membered heterocyclic ring; n1 =

1-4;
when n1 = 1, R3 = saturated or unsatd. heterocyclic radical,
hydroxy-C1-C5
alky1, cyclohexy1 optionally substituted with one or more C1-5 alky1, Ph
optionally substituted with a heterocyclic radical, aminocarbony1, C1-5
alky1carboxy; when n1 = 2, R3 = alky1ene, cycloalky1ene or alkeny1ene
radical which is optionally substituted by a carbony1 or carboxy group;

R3 together with A forms a bivalent radical of the formula Q; wherein n2

1-3; when n1 = 3, R3 = alkanetriyl radical; when n1 = 4, R3 = alkanetetrayl radical; A = 0, N(R5); R5 = H, C1-5 alkyl, hydroxy-C1-5 alkyl). These compds. are useful as UV filters in sunscreen applications, prieferably for the protection of human and animal hairs and from the damage of UV radiation as well as cosmetic compns. comprising these compds. Thus, a solution of 10.6 g 3-diethylaminodibenzooxepin

(preparation given) in 20 mL diethylene glycol di-Me ether was added to a suspension

7.2 g 2-(4-aminophenyl)-6-methylbenzothiazole are suspended in 60 mL diethylene glycol di-Me ether at room temperature under stirring, heated

90°, and allowed to react for 4 h to give 7.3 g N-[4-(6-methylbenzothiazol-2-yl)phenyl]-2-(4-diethylamino-2-

N-[4-(6-methylbenzothiazol-2-yl]phenyl]-2-(4-diethylamino-2-hydroxybenzoyl)benzamide.
682349-14-0P, N-[4-(6-methylbenzothiazol-2-yl]phenyl]-2-(4-diethylamino-2-hydroxybenzoyl)benzamide 682349-15-1P,
N-[4-Carbamoylphenyl]-2-(4-diethylamino-2-hydroxybenzoyl)benzamide 682349-18-4P, 1,6-Bis[(2-4-(diethylamino)-2-hydroxybenzoyl)benzomide 682349-18-9P,
N-Phenyl-2-(4-diethylamino-2-hydroxybenzoyl)benzamide 682349-20-8P,
A-[2-(4-Diethylamino-2-hydroxybenzoyl)benzamide 682349-20-8P,
682349-21-9P, N,N-Bis(2-hydroxybenzoyl)benzoyl)benzomide 682349-21-9P,
Ndroxybenzoyl)benzomide
RL: BUU (Biological use, unclassified); COS (Cosmetic use); SPN
thetic

cnecic
preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino substituted hydroxyphenyl benzophenone derivs.

absorbers in sunscreen applications)
68249-14-0 CAPLUS
Benzamide, 2-[4-(diethylamino)-2-hydroxybenzoy1]-N-[4-(6-methyl-2-

L3 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:515467 CAPLUS DOCUMENT NUMBER: 141:71355 TITLE: Preparation

Preparation of amino substituted hydroxyphenyl benzophenone derivatives as UV absorbers Haase, Juerg; Ehlis, Thomas; Borsos, Elek; Mueller, Stefan INVENTOR (S):

Ciba Specialty Chemicals Holding Inc., Switz. PCT Int. Appl., 50 pp. CODEN: PIXXD2 PATENT ASSIGNEE(S):

DOCUMENT TYPE:

English FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. A2 A3 AM, 20040624 WO 2004052837 WO 2003-EP50937 20031203 WO 2004052837 AE, AG, CN, CO, GE, GH, LK, LR, NZ, OM, TM, TN, BW, GH, BY, KG, ES, FI, TR, BF, 20040910 20040910
AT, AU, AZ, BA,
CZ, DE, DK, DM,
HU, ID, IL, IN,
LU, LV, MA, MD,
PL, FT, RO, RU,
TZ, UA, UG, US,
LS, MW, MZ, SD,
RU, TJ, TM, AT,
GR, HU, IE, IT,
CG, CI, CM, GA, BB, BG, BR, BW, BY, D2, EC, EE, EG, ES, IS, JP, KE, KG, KP, MG, MK, MN, MX, VX, SC, SD, SE, SG, SK, UZ, VC, VN, YU, ZA, SL, SZ, TZ, UG, ZM, BE, BG, CH, CY, CZ, LU, MC, NL, PT, RO, GN, GQ, GW, ML, MR, AL, AM, CR, CU, GM, HR, LS, LT, PG, PH, TR, TT, GM, KE, KZ, MD, FR, GB, BJ, CF, AU 2003298343 A1 20040630
EP 1569893 A2 20050907
R: AT, BE, CH, DE, DK, ES, FR,
IE, SI, LT, LV, FI, RO, MK,
BR 2003016607 A 20051011
CN 1726184 A 20060125
JP 2006509834 T 20060123
US 2006018846 A1 20060126 AU 2003-298343 20031203
EP 2003-796081 20031203
GB, GR, IT, LI, LU, NL, SE, MC, PT,
AL, TR, BG, CZ, EE, HU, SK
BR 2003-16607 20031203
CP 2003-5010-045 20031203
JP 2005-502323 20031203
JS 2005-5037940 20050607
EP 2002-406093 A 20021212 CN 1726184 JP 2006509834 US 2006018846 PRIORITY APPLN. INFO.: A 20030625

EP 2003-102297 A 20030725 WO 2003-EP50937 W 20031203

OTHER SOURCE(S): MARPAT 141:71355

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN benzothiazolyl)phenyl)- (9CI) (CA INDEX NAME)

(Continued)

682349-15-1 CAPLUS
Benzamide, N-[4-{aminocarbonyl)phenyl]-2-[4-(diethylamino)-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

682349-18-4 CAPLUS Benzamide, N,N'-1,6-hexanediylbis[2-[4-(diethylamino)-2-hydroxybenzoyl]-[SCI] (CA INDEX NAME)

682349-19-5 CAPLUS
Benzamide, 2-[4-{diethylamino}-2-hydroxybenzoyl]-N-phenyl- (9CI) (CA

ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN INDEX NAME)

682349-20-8 CAPLUS Morpholine, 4-[2-[4-(diethylamino)-2-hydroxybenzoyl]benzoyl]- (9CI) (CA INDEX NAME)

-21-9 CAPLUS (de, 2-[4-(diethylamino)-2-hydroxybenzoyl]-N,N-bis(2-hydroxyethyl)-(CA INDEX NAME)

L3 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:836807 CAPLUS DOCUMENT NUMBER: 139:327930 Crganosilicone derivatives of Organosilicone derivatives of amino Organosilicone derivatives of amino hydroxybenzophenones and their use as UVA filters in cosmetic preparations ,
Berg-Schultz, Katja; Huber, Ulrich Roche Vitamins A.-G., Switz.
PCT Int. Appl., 27 pp.
CODEN-BIXED
Patent INVENTOR(S):
PATENT ASSIGNEE(S):
SOURCE: DOCUMENT TYPE: LANGUAGE: English FAMILY ACC. NUM. COUNT PATENT INFORMATION:

PRIORITY APPLN. INFO.: WO 2003-EP3095

The present invention relates to organosilicone derivs. of amino hydroxybenzophenones, a process for their preparation, a cosmetic compns. comprising the organosilicone derivative and the use thereof for ecting hair and/or skin from damage caused by UVA irradiation 614755-90-7P RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PRCT (Reactant or reagent)

sunscreen against UVA radiation for coametics)
614755-90-7 CAPLUS
Benzamide, 2-[4-[dlethylamino]-2-hydroxybenzoyl]-N-2-propynyl- (9CI) (CA

ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

NH- CH2- C= CH

REFERENCE COUNT: THIS

intermediate 0 0

THERE ARE 11 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L3 ANSWER 4 OF 5
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:

AUTHOR(S):

CAPLUS COPYRIGHT 2007 ACS on STN
2003:830446 CAPLUS
140:362521
Preparation of amino substituted hydroxyphenyl
benzophenone derivatives and their uses as UV filters
in sunscreen formulations
ADD.

ADD.

ADD. AUTHOR(S): CORPORATE SOURCE: SOURCE: IPCOM000018721D) Anon. USA . IP.Com Journal (2003), 3(8), 40 (No.

, 4 Aug 2003 CODEN: IJPOBX; ISSN: 1533-0001 IP.com, Inc. Journal; Patent English PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
PATENT INFORMATION:

APPLICATION NO. PATENT NO. DATE IP 18721D PRIORITY APPLN. INFO.: 20030804 IP 2003-18721D 20030804

Described are synthesis of amino substituted hydroxyphenyl benzophenone derivs. The compds. are useful as UV filters in sunscreen applications. For example, comound I synthesized by reacting anhydrous 4-diethylamino 2-hydroxy benzophenone carboxylic acid with 2,2-dimethyl-1,3-propanediol was found to be a good UV absorber and was incorporated into sunscreen formulations.
602349-14-0P 682349-15-1P 682349-18-4P 682349-18-5P 682349-20-5P 682349-20-5P 682349-21-5P RL: COS (Cosmetic use), SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of amino substituted hydroxyphenyl benzophenone derivs.

their uses as UV filters in sunscreen formulations)
682349-14-0 CAPLUS
Benzamide, 2-[4-(diethylamino)-2-hydroxybenzoyl]-N-[4-(6-methyl-2-benzothiazolyl)phenyl]- (9CI) (CA INDEX NAME)

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

682349-15-1 CAPLUS
Benzamide, N-[4-(aminocarbonyl)phenyl]-2-[4-(diethylamino)-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

682349-18-4 CAPLUS
Benzamide, N,N'-1,6-hexanediylbis[2-[4-(diethylamino)-2-hydroxybenzoyl]-(9C1) (CA INDEX NAME)

L3 ANSWER 5 OF 5
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
INVENTOR(S):
SOURCE:

DOCUMENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
FAMILU ACC. NUM. COUNT:
FAMILU ACC. NUM. COUNT:
PATENT INFORMATION: ntaining benzoyl benzamides Goodbrand, H. Bruce

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------------------|------|----------|-----------------|-----------|
| | | | | |
| US 6328793 | B1 | 20011211 | US 2000-632190 | 20000803 |
| PRIORITY APPIN. INFO. : | | | 115 2000-632190 | 200000803 |

OTHER SOURCE(s): MARPAT 136:38973

AB Disclosed is an ink composition comprising (a) a benzoyl benzamide compound; (b)

a viscosity-modifying benzoyl-group-containing compound; (c) a colorant; and (d)

(d)
an optional conductivity enhancing agent.
380228-12-6
RL: TEM (Technical or engineered material use); USES (Uses)
(phase-change inks containing benzoyl benzamides)
380228-12-6 CAPLUS
Benzamide, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

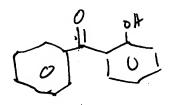
REFERENCE COUNT:

THERE ARE 27 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 602349-19-5 CAPLUS
Benzamide, 2-(a-(diethylamino)-2-hydroxybenzoyl)-N-phenyl- (9CI) (CA INDEX NAME)

682349-20-8 CAPLUS Morpholine, 4-[2-[4-INDEX NAME) flethylamino)-2-hydroxybenzoyl]benzoyl]- (9CI) (CA

682349-Zr=9 CAPLUS
Benzamide, 2-[4-(diethylamino)-2-hydroxybenzoyl]-N,N-bis(2-hydroxyethyl)-(9CI) (CA INDEX NAME) RN CN



Uploading C:\Program Files\Stnexp\Queries\10537940\april 2.str

chain nodes :

7 9 17 19 21 23 24 25 26

ring nodes :

1 2 3 4 5 6 8 10 11 12 13 14

ring/chain nodes :

15 18

chain bonds :

1-25 2-26 3-7 4-17 5-23 6-24 7-8 7-9 14-21 17-18 17-19

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14

exact/norm bonds :

7-9 14-21 17-18 17-19

exact bonds :

1-25 2-26 3-7 4-17 5-23 6-24 7-8

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14

isolated ring systems :

containing 1 : 8 :

G1:0, N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 17:CLASS 18:CLASS 19:CLASS

21:CLASS 22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS

STRUCTURE UPLOADED L4

=> d

L4 HAS NO ANSWERS

L4STR

G1 O, N

L5

Structure attributes must be viewed using STN Express query preparation.

=> s 14 full
 REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SEARCH INITIATED 11:13:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2254 TO ITERATE

100.0% PROCESSED \ 2254 I

2254 ITERATIONS

SEARCH TIME: 00.00.01

272 SEA SSS FUL L4

L6 665 L5

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272 ANSWERS

```
chain nodes :
7 9 17 19 20 22 23 24 25 27
ring nodes :
1 2 3 4 5 6 8 10 11 12 13 14
ring/chain nodes :
15 18
chain bonds :
1-24 2-25 3-7 4-17 5-22 6-23 7-8 7-9 14-20 17-18 17-19 18-27
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14
exact/norm bonds :
7-9 14-20 17-18 17-19 18-27
exact bonds :
1-24 2-25 3-7 4-17 5-22 6-23 7-8
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14
isolated ring systems :
containing 1 : 8 :
```

G1:Cy, Ak

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS

L7 STRUCTURE UPLOADED

G1 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 17 full sub=15 REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SUBSET SEARCH INITIATED 11:14:18 FILE 'REGISTRY'
FULL SUBSET SCREEN SEARCH COMPLETED - 272 TO ITERATE

100.0% PROCESSED SEARCH TIME: 00 00.01

L8

272 ITERATIONS

34 SEA SUB=L5 SSS FUL L7

34 ANSWERS /

SUBSET IS IGNORED AS A SCOPE FOR THIS SEARCH 166 L8

=> fil reg

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 0.94 414.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -3.90

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STRUCTURE FILE UPDATES: 16 APR 2007 HIGHEST RN 930395-50-9 DICTIONARY FILE UPDATES: 16 APR 2007 HIGHEST RN 930395-50-9

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http://www.cas.org/ONLINE/UG/regprops.html

=> sel rn 18 E1 THROUGH E34 ASSIGNED

=> s e1-e34

1 139394-79-9/BI (139394-79-9/RN) 1 139394-80-2/BI (139394-80-2/RN) 1 139395-21-4/BI (139395-21-4/RN) 1 302776-65-4/BI (302776-65-4/RN) 1 302776-66-5/BI (302776-66-5/RN) 1 302776-67-6/BI (302776-67-6/RN) 1 302776-68-7/BI registry curply -34

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(302776-68-7/RN)
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     (302776-69-8/RN)
 1 302776-70-1/BI
     (302776-70-1/RN)
 1 302776-73-4/BI
     (302776-73-4/RN)
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     (363602-14-6/RN)
 1 470716-63-3/BI
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 1 614755-88-3/BI
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 1 614755-89-4/BI
     (614755-89-4/RN)
 1 682349-16-2/BI
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 1 682349-17-3/BI
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 1 682349-22-0/BI
     (682349-22-0/RN)
 1 682349-23-1/BI
     (682349-23-1/RN)
 1 682349-24-2/BI
     (682349-24-2/RN)
 1 682349-25-3/BI
     (682349-25-3/RN)
 1 682349-26-4/BI
     (682349-26-4/RN)
 1 682349-27-5/BI
     (682349-27-5/RN)
 1 682349-28-6/BI
     (682349-28-6/RN)
 1 682349-29-7/BI
     (682349-29-7/RN)
 1 682349-30-0/BI
     (682349-30-0/RN)
 1 682349-31-1/BI
     (682349-31-1/RN)
 1 682349-32-2/BI
     (682349-32-2/RN)
 1 682349-33-3/BI
     (682349-33-3/RN)
 1 682349-34-4/BI
     (682349-34-4/RN)
 1 876758-12-2/BI
     (876758-12-2/RN)
 1 901120-84-1/BI
     (901120-84-1/RN)
 1 916463-31-5/BI
     (916463-31-5/RN)
 1 916463-32-6/BI
     (916463-32-6/RN)
 1 95317-77-4/BI
     (95317-77-4/RN)
34 (139394-79-9/BI OR 139394-80-2/BI OR 139395-21-4/BI OR 302776-65
```

-4/BI OR 302776-66-5/BI OR 302776-67-6/BI OR 302776-68-7/BI OR

L10

302776-69-8/BI OR 302776-70-1/BI OR 302776-73-4/BI OR 363602-14-6/BI OR 470716-63-3/BI OR 614755-88-3/BI OR 614755-89-4/BI OR 682349-16-2/BI OR 682349-17-3/BI OR 682349-22-0/BI OR 682349-23-1/BI OR 682349-24-2/BI OR 682349-25-3/BI OR 682349-26-4/BI OR 682349-27-5/BI OR 682349-28-6/BI OR 682349-29-7/BI OR 682349-30-0/BI OR 682349-31-1/BI OR 682349-32-2/BI OR 682349-33-3/BI OR 682349-34-4/BI OR 876758-12-2/BI OR 901120-84-1/BI OR 916463-31-5/BI OR 916463-32-6/BI OR 95317-77-4/BI)

=> d 1-34

```
L10 ANSWER 1 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN

RN 916463-32-6 REGISTRY
ED Entered STN: 28 Dec 2006
Propanedioic acid, 2-[(4-[(2-(dihydroxymethylsilyl)-2-propen-1-ylloxy]phenyl]methylene]-, 1,3-diethyl ester, polymer with 2-(dihydroxymethylsilyl)-2-propen-1-yl 2-[4-(diethylamino)-2-hydroxybenzoyl]benzoate and 1,1-dimethylsilanediol (CA INDEX NAME)

MF (C22 H27 N 06 Si . C18 H24 O7 Si . C2 H8 O2 Si)x
PMS
PMS
CA
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 916463-31-5
CMF C22 H27 N 06 Si
```

when $N_1 = 1$, $R_3 = het$ - 10 ar4when $N_1 = 2-4$

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & \\ & & \\ &$$

CRN 1066-42-8 CMF C2 H8 O2 Si

CM 2 CRN 177955-89-4 CMF C18 H24 O7 S1

LIO ANSWER 2 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN RN 916463-31-5 REGISTRY ED Entered STN: 28 Dec 2006 CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyll-, 2-(dihydroxymethylsilyl)-2-propen-1-yl ester (CA INDEX NAME) MF C22 H27 N O6 Si CC COM SR CA

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 ANSWER 3 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
RN 901120-84-1 REGISTRY
ED Entered STN: 14 Aug 2006
Benzolc acid, 2-14-(dethylamino)-2-hydroxybenzoyl)-, hexyl ester, compd. with 2-ethylhexyl 3-(4-methoxyphenyl)-2-propenoate (1:1) (9CI) (CA INDEX NAME):
CN Uvinul A plus B
MF C24 H31 N O4 . C18 H26 O3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

CM 1

CRN 302776-68-7
CMF C24 H31 N O4

CM 2

CRN 5466-77-3
CMF C18 H26 O3

O Ethylory CH=CH-C-O-CH2-CH-Bu-n

ANSWER 4 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN 876758-12-2 REGISTRY
Entered STN: 14 Mar 2006
Benzolc acid, 2-{4-(diethylamino)-2-hydroxybenzoyl}-, 3-hydroxy-2-oxppropyl exter (9CI) (CA INDEX NAME)
C21 H23 N 06
CA STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT*

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 ANSWER 8 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN
RN 682349-31-1 REGISTRY
ED Entered STN: 17 May 2004
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 3-hydroxy-2,2dimethylpropyl ester (9CI) (CA INDEX NAME)
MF C23 H29 N O5
SC CA
LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

. PAGE 1-A

PAGE 2-A

NEto

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 ANSWER 12 C 34 REGISTRY COPYRIGHT 2007 ACS on STN

RN 682349-27-5 REGISTRY

ED Entered STN 17 May 2004

(M Benzolc acid) 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 3-[3-[[2-[4-(diethylamino)-2-hydroxybenzoyl]-, 3-[3-[[4-(diethylamino)-2-hydroxybenzoyl]-, 3-[3-[[4-(diethylamino)-2-hydroxyb

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

• 1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L10 ANSWER 14 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN RN 662349-25-3 REGISTRY
ED Entered STM 17 May 2004
CN Benzoic acid 2-[4-(diethylamino)-2-hydroxybenzoyl]-,
nxvdi-2_le-tharediyl
ester (9CI) (CA INDEX NAME)
MF C40 H44 N2 O9
SR CA
LC STN Files: CA, CAPLUS
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
LIO ANSWER 13 OF 3 REGISTRY COPYRIGHT 2007 ACS ON STN
RN 682349-26-4 REGISTRY
ED Entered STN: 17 May 2004
N Benzoic acid, 17 May 2004
[14-(diethylamino)-2-hydroxybenzoyl]-,
methylaminolid-2,1-
ethanedidi-2,1-
ethanedidi-2,
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
LIO ANSWER 15 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN
RN 682349-24-2 REGISTRY
ED Entered STN: 10 May 2004
CN Benzoic acid, 23 (4-(diethylamino)-2-hydroxybenzoyl)-, 1,2-ethanediyl
ester
(9CI) (CA INDEX NAME)
MF C38 H40 N2 08
SR CA
LC STN Files: CA, CAPLUS
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

LIO ANSWER 16 OF 3 REGISTRY COPYRIGHT 2007 ACS ON STN

RN 682349-23-1 REDISTRY
ED Entered STN: 1 May 2004
CN Benzolc acid, 2-4 - (diethylamino)-2-hydroxybenzoyl]-, 2,2-dimethyl-1,3propencyl-beart (9CI) (CA INDEX NAME)

CN 1,3-Bis[2-[4-(diethylamino)-2-hydroxybenzoyl]benzoyl]oxy]-2,2dimethylpropane
MF C41 H46 N2 OB
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 18 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN 682349-17-3 REGISTRY Entered STN: 17 May 2004 Benzoic acid, 2-[4-[diethylamino]-2-hydroxybenzoyl]-, 5-methyl-2-(1-methylethyl)cyclohexyl ester (9CI) (CA INDEX NAME) C28 H37 N O4

CA
STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 17 OF 34/ REGISTRY COPYRIGHT 2007 ACS on STN 682349-22-0 REGISTRY Entered STN: 17 May 2004 Benzoic acid. 2 (4-(diethylamino)-2-hydroxybenzoyl]-, 2-butene-1,4-diylamino) (CA INDEX NAME)

COTHER NAMES:

CN 1,4-Dis[[2-[4-(diethylamino)-2-hydroxybenzoyl]benzoyl]oxy]-2-butene
MF C40 H42 N2 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
ANSWER 19 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN 682349-16-2 REGISTRY COPYRIGHT 2007 ACS ON STN Entered STN: 17 May 2004 .
Benzoic acid. 2-14 diethylamino)-2-hydroxybenzoyl]-, 1,6-hexanediyl
(9C1) (CA INDEX NAME)
OTHER NAMES:
CN 1,6-81s[[2-[4-(diethylamino)-2-hydroxybenzoyl]benzoyl]oxy]hexane
MF C42 H48 N2 O8
SR CA
LC STN Files: CA, CAPLUS, USPATFULL
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L10 ANSWER 20 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
RN 614755-89-4 REGISTRY
ED Entered STN: 10 Nov 2003
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-propen-1-yl ester
(CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-propenyl ester
(9C1)
MF C21 H23 N 04
SC CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

X

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 21 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN 614755-88-3 REGISTRY Entered STN: 10 Nov 2003 Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-propynyl ester (9CI) (CA INDEX NAME) C21 H21 N O4 CA STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 22 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
470716-63-3 REGISTRY
ED Entered STN: 06 Nov 2002
Benzoic acid, 2-14-[(cyclohexylcarbonyl)amino]-2-hydroxybenzoyl]-, ethylester (9C1) (CA INDEX NAME)
MF C23 H25 N 05
SR CA

STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 23 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
RN 363602-14-6 REGISTRY
ED Entered STN: 22 Oct 2001

Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, hexyl ester, mixt.
with 2-ethylhexyl 2-cyano-3,3-diphenyl-2-propenoate (9CI) (CA INDEX NAME)

NAME)

OTHER CA INDEX NAMES:

CN 2-Propencic acid, 2-cyano-3,3-diphenyl-, 2-ethylhexyl ester, mixt. contg. (9C1)

HF C24 H31 N O4 . C24 H27 N O2

CI MXS

SR CA

LC STN Files: CA, CAPLUS, USPAT2, USPATFULL

O CPh2 || || CH2-O-C-C-CN Et-CH-Bu-n

L10 ANSWER 24 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN RN 302776-73-4 REGISTRY ED Entered STN: 14 Nov 2000 CN Benzoic acid, 2-[2-hydroxy-4-(1-pyrrolidinyl)benzoyl]-, methyl ester (9CI)

CA STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
ANSWER 26 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN 302776-69-8 REGISTRY Entered STN: 14 Nov 2000 Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]-, methyl ester (9CI) (CA INDEX NAME) C23 H29 N O4 CA STN Files: CA, CAPLUS, USPAT2, USPATFULL
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L10 ANSWER 25 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN RN 302776-70-1 REGISTRY ED Entered STN: 14 Nov 2000 CN Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl)-, 2-methylpropyl ester
         IF
(9CI) (CA INDEX NAME)
C26 H35 N O4
CA
STN Files: CA, CAPLUS, USPAT2, USPATFULL
                                      N (Bu-n) 2
          OBu-i
```

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

150 REFERENCES IN FILE CA (1907 TO DATE) 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 152 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 28 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
RN 302776-67-6 REGISTRY
ED Entered STN: 14 Nov 2000
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, cyclohexyl ester
(9C1) (CA INDEX NAME)
MF C24 H29 N 04

CA STN Files: CA, CAPLUS, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 29 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN 302776-66-5 REGISTRY :
Entered STN: 14 Nov 2000 Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-ethylhexyl ester (9CI) (CA INDEX NAME) C26 H35 N O4 CA STN Files: CA, CAPLUS, USPAT2, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 31 OF 34 REGISTRY COPYRIGHT 2007 ACS ON STN
RN 139395-21-4 REGISTRY
ED Entered STN: 06 Mar 1992
CN Benzoic acid, 2-{2-hydroxy-3-{{1-cxo-2-(4'-pentyl{1,1'-biphenyl}-4-yl)propyl}amino|benzoyl}-, ethyl ester (9CI) (CA INDEX NAME)
MF C36 H37 N OS
CA
LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ANSWER 32 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN 139394-80-2 REGISTRY
Entered STN: 06 Mar 1992
Benzoic acid, 2-(3-amino-2-hydroxybenzoyl)-, ethyl ester (9CI) (CA INDEX NAME)
C16 H15 N 04
CA
STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 33 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
139394-79-9 REGISTRY
Entered STN: 06 Mar 1992
Benzolc ecid, 2-(2-hydroxy-3-nitrobenzoyl)-, ethyl ester (9CI) (CA INDEX
NAME)
C16 H13 N 06
CA
STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L10 ANSWER 34 OF 34 REGISTRY COPYRIGHT 2007 ACS on STN
RN 95317-77-4 REGISTRY
ED Entered STN: 16 Mar 1985
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, methyl ester (9CI)
(CA INDEX NAME)
CTHER CA INDEX NAMES:
CN Benzoic acid, o-[4-(diethylamino)salicyloyl]-, methyl ester (7CI)
MF C19 H21 N O4
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, USPAT2, USPATFULL
(*File contains numerically searchable property data)
```

**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT **

8 REFERENCES IN FILE CA (1907 TO DATE) 8 REFERENCES IN FILE CAPLUS (1907 TO DATE) 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
=> d his
```

L6

(FILE 'HOME' ENTERED AT 11:11:29 ON 18 APR 2007)

FILE 'REGISTRY' ENTERED AT 11:11:37 ON 18 APR 2007

L1 STRUCTURE UPLOADED

L2 9 S L1 FULL

FILE 'CAPLUS' ENTERED AT 11:12:01 ON 18 APR 2007

L3 5 S L2

L4 STRUCTURE UPLOADED

S L4

FILE 'REGISTRY' ENTERED AT 11:13:43 ON 18 APR 2007

L5 272 S L4 FULL

FILE 'CAPLUS' ENTERED AT 11:13:43 ON 18 APR 2007

665 S L5 FULL

L7 STRUCTURE UPLOADED

S L7

FILE 'REGISTRY' ENTERED AT 11:14:18 ON 18 APR 2007

L8 34 S L7 FULL SUB=L5

FILE 'CAPLUS' ENTERED AT 11:14:19 ON 18 APR 2007

L9 166 S L8 SUBSET=L5 FULL

FILE 'REGISTRY' ENTERED AT 11:15:32 ON 18 APR 2007

SEL RN L8

110 34 S E1-E34 - 10 dimers u,= 2

13 species wherein A=0

=> fil caplus

COST IN U.S. DOLLARS

2 trimers 1 = 3

SINCE FILE ENTRY n₁= 2-4

FULL ESTIMATED COST

wish E

ENTRY SESSION 78.47 493.15

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE ENTRY

CA SUBSCRIBER PRICE

TRY SESSION
0.00 -3.90

TOTAL

FILE 'CAPLUS' ENTERED AT 11:28:15 ON 18 APR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 18 Apr 2007 VOL 146 ISS 17

FILE LAST UPDATED: 16 Apr 2007 (20070416/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s L6 and (UV) 519811 UV

L11 117 L6 AND (UV)

=> s L6 and (UV or sun)

519811 UV

57565 SUN

L12 121 L6 AND (UV OR SUN)

=> s L6 and (UV or sun?)

519811 UV

136075 SUN?

L13 177 L6 AND (UV OR SUN?)

=>

Uploading C:\Program Files\Stnexp\Queries\10537940\april 4.str

chain nodes : 7 9 17 18 19 20 22 23

ring nodes:
1 2 3 4 5 6 8 10 11 12 13 14

ring/chain nodes :

15

chain bonds :

1-24 2-25 3-7 4-17 5-22 6-23 7-8 7-9 14-20 17-18 17-19 18-27

25

27

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 8-10 8-14 10-11 11-12 12-13 13-14

exact/norm bonds :

7-9 14-20

exact bonds :

1-24 2-25 3-7 4-17 5-22 6-23 7-8 18-27

normalized bonds :

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 8-10 \quad 8-14 \quad 10-11 \quad 11-12 \quad 12-13 \quad 13-14 \quad 17-18 \quad 17-19$

isolated ring systems:

containing 1 : 8 :

G1:Cy,Ak

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:Atom 9:CLASS 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 17:CLASS 18:CLASS 19:CLASS

20:CLASS 21:Atom 22:CLASS 23:CLASS 24:CLASS 25:CLASS 27:CLASS

L14 STRUCTURE UPLOADED

=> dL14 HAS NO ANSWERS

L14 STR

G1 Cy, Ak

Structure attributes must be viewed using STN Express query preparation.

=> s 114 full sub=15 REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress... Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

FULL SUBSET SEARCH INITIATED 11:32:37 FILE 'REGISTRY' FULL SUBSET SCREEN SEARCH COMPLETED -240 TO ITERATE .

100.0% PROCESSED SEARCH TIME: 00.00,01

240 ITERATIONS

238 ANSWERS

L15

238 SEA SUB=L5 SSS FUL L14

```
SUBSET IS IGNORED AS A SCOPE FOR THIS SEARCH L16 514 L15
```

=> s 116 and (UV absorber)

519811 UV

42326 ABSORBER

7270 UV ABSORBER

(UV(W)ABSORBER)

L17

3 L16 AND (UV ABSORBER)

=> s l16 and (UV) 519811 UV

L18

25 L16 AND (UV)

=> d ibib abs hitstr L18 1-25

.,

a uv (claim 29)

L18 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

```
L18 ANSWER 1 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2006:1279755 CAPLUS DOCUMENT NUMBER: 146:49764
  TITLE:
                                                                                                                                                  Preparation of polysiloxane sunscreens
  INVENTOR (S):
                                                                                                                                                  Berg-Schultz, Katja; Poschalko, Alexander; Vollhardt,
                                                                                                                                               Berg-Schultz, Katja; Posci
Juergen H.
Dsm Ip Assets B.V., Neth.
PCT Int. Appl., 37pp.
CODEN: PIXXD2
Patent
  PATENT ASSIGNEE(S):
  DOCUMENT TYPE:
  LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                            English
                               PATENT NO.
                                                                                                                                                  KIND
                                                                                                                                                                                     DATE
                                                                                                                                                                                                                                                            APPLICATION NO.
WI 2006128614 A1 20061207 W0 2006-EP4879 20060523

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IM, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MM, MZ, NA, NG, NI, NO, NZ, OM, PC, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GR, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, JJ, TM

PRIORITY APPLN. INFO:: EP 2005-11678 A 20050531
AB The present invention relates to novel sunscreens on the basis of polysiloxanes, to their preparation and to their use, especially in formulations for the protection against harmful effects of sunlight. A polysiloxane copolymer containing 4-[(2,2-diethoxycarbonyllyinyl]phenoxymethyl and 2-(4-diethylamino-2-hydroxybenzoyl)benzoyloxymethyl groups was prepared and
  and
                             used in sunscreen formulations.
5809-23-4, 2-(4-Diethylamino-2-hydroxybenzoyl)benzoic acid
RE: RCT (Reactant); RACT (Reactant or reagent)
(preparation of polysiloxane sunscreens)
5809-23-4 CAPLUS
Benzoic acid, 2-(4-(diethylamino)-2-hydroxybenzoyl)- (CA INDEX NAME)
 IT
 REFERENCE COUNT:
                                                                                                                                                                                  THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
  FORMAT
L18 ANSWER 2 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
131:372818
UV absorbing chromophores covalently bonded to hyperbranched polymers for sunscreens Poschalko, Alexander; Hubber, Ulrich; Schehlmann, Volker
PATENT ASSIGNEE(S):
SOURCE:
DOCUMENT TYPE:
DOCUMENT TYPE:
LANGUAGE:
FAMILV ACC. NUM. COUNT:
FAMILV ACC. NUM. CO
  LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                               PATENT NO.
                                                                                                                                                                                     DATE
                                                                                                                                                  KIND
                                                                                                                                                                                                                                                            APPLICATION NO.
                                                                                                                                                                                                                                                                                                                                                                                             DATE
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L18 ANSWER 2 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continuous for sunscreens)
RN 866139-98-2 CAPLUS .
CN Hybrane D 2000, 2-[4-(diethylamino)-2-hydroxybenzoyl]benzoate 4-(dimethylamino)benzoate (9CI) (CA INDEX NAME)
                      367513-09-5
Unspecified
PMS, MAN
         STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                    2
            CM
                       5809-23-4
C18 H19 N O4
                     3
            CM 
                        619-84-1
C9 H11 N O2
            5809-23-4, 2-{4-Diethylamino-2-hydroxybenzoyl)benzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(UV absorbing chromophores covalently bonded to hyperbranched
polymers for sunscreens)
5809-23-4 CAPLUS
Benzoic acid, 2-{4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)
 REFERENCE COUNT:
THIS
                                                                           THERE ARE 18 CITED REFERENCES AVAILABLE FOR
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WO 2005092282 W: AE, AG

A1

20051006

092282 A1 20051006 W0 2005-EP3117 AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SY, TJ, TM, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN,

WO 2005-EP3117

20050323

MZ, NA, NI, SK, SL, SM, YU, ZA, ZM,

COPYRIGHT 2007 ACS on STN (Continued)
RECORD. ALL CITATIONS AVAILABLE IN THE RE L18 ANSWER 2 OF 25 CAPLUS FORMAT

L18 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2005:1066708 CAPLUS DOCUMENT NUMBER: 145:46021 TITLE: Synthesis and characteristics

145:46021
Synthesis and characterization of bromoquinazolinone substituted spiro[isobenzofuran-1,9'-xanthene]-3-ones Patel, S. V.; Patel, M. P.; Patel, R. G. Department of Chemistry, Sardar Patel University, Gujarat, 388 120. India Journal of the Iranian Chemical Society (2005), 2(3), 220-225
CODEN: JICSCJ; ISSN: 1735-207X
Iranian Chemical Society AUTHOR(S): CORPORATE SOURCE:

SOURCE:

PUBLISHER:

DOCUMENT TYPE: LANGUAGE: GI English

AB Some bromoquinazolinone substituted fluoran compds., e.g., I, were synthesized by the reaction of the keto acid, 2-{4-diethylamino-2-hydroxybenzoyl)benzoic acid with different
3-(hydroxyphenyl)-6-bromo-4(3H)-quinazolinones in the presence of a dehydration condensing agent like sulfuric acid. Various quinazolinones were prepared by reacting monobromo/dibromobenzoxazine-4-ones with 3-aminophenol or 4-aminophenol in

the presence of pyridine as a solvent. All the synthesized fluoran compds. Were identified by conventional methods such as m.p., IR, 1H NMR, 13C NMR, elemental anal. and UV-visible spectroscopy in organic solvents and 95% acetic acid. All these coloriess fluorans develop a color in contact with electron accepting compds. 5809-23-48. RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

[preparation of [diethylamino(hydroxy)benzoyl]benzoic acid via action of

[preparation of [diethylamino(hydroxy)benzoyl]benzoic acid via acylation of diethylaminophenyl with phthalic anhydride in the preparation of fluorans)
RN 5809-23-4 CAPLUS
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 3 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

THERE ARE 22 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L18 ANSWER 4 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
145:103621
Synthesis and characterization of novel substituted spiro(isobenzofuran-1(3H),9'-xanthene)-3-ones
Patel, Sachin V.; Patel, Manish P.; Patel, Rangan G.
CORPORATE SOURCE:
SOURCE:
SOURCE:
Journal of the Serbian Chemical Society (2005),

931-936 CODEN: JSCSEN: ISSN: 0352-5139 Serbian Chemical Society Journal

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

English CASREACT .145:103621 OTHER SOURCE(S):

The ketoacid, 2-(4-diethylamino-2-hydroxybenzoyl)benzoic acid, prepared

N,N-diethyl-m-aminophenol and phthalic anhydride, reacted with various substituted 3-(6-methoxybenzothlazol-2-yl)-4(3H)-quinazolinones in the presence of a dehydration condensing agent to afford novel spiro[isobenzofuran-1(3H),9'-xanthene]-3-ones, e.g., I (R = H or Br).

benzothiazolyl quinazolinones were synthesized by reacting 2-amino-6-methoxybenzothiazole with various substituted benzoxazinones. All compds. were characterized by m.p. determination, elemental anal.,

IR, NMR and
UV-visible spectroscopy. All the fluoran compds. were colorless
or nearly colorless and produce color in the presence of acidic media.

or nearly colorless and produce color in the presence of acidic media.
5809-23-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of diethylamino(hydroxybenzoyl)benzoic acid via

aroylation of

(diethylamino)phenol with phthalic anhydride)

5809-23-4 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 4 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

their application in reversible thermochromic materials

AUTHOR(S): Patel, Ritesh G.; Patel, Manish P.; Patel, Ranjan G. Department of Chemistry, Sardar Patel University, Gujarat, 388 120, India Dyes and Pigments (2005), 66(1), 7-13

PUBBLISHER: Document Journal Language L

REFERENCE COUNT:

THERE ARE 50 CITED REFERENCES AVAILABLE FOR 50

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L18 ANSWER 6 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2004:515467 CAPLUS DOCUMENT NUMBER: 141:71355
TITLE: Preparation of amino substitut

INVENTOR (S):

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

141:71355
Preparation of amino substituted hydroxyphenyl benzophenone derivatives as UV absorbers Haase, Juerg; Ehlis, Thomas; Borsos, Elek; Mueller, Stefan Ciba Specialty Chemicals Holding Inc., Switz. PCT Int. Appl., 50 pp. CODEN: PIXXD2
Patent English 1 Instant App

| | PA' | TENT | ΝО. | | | KIN | D | DATE | | • | | | | NO. | | D | ATE | |
|------|-----|--------------|------|-----|-----|-----|-----|------|------------|-----|------|------|---------|-----|-----|-----|------|-----|
| | WO. | 2004 | 0528 | 37 | | B2 | - | 2004 | 0624 | | | 003- | | 937 | | 2 | 0031 | 203 |
| | | 2004 | | | | | | | | | | | | ,, | | - | 0031 | 203 |
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| | | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | | GE, | GH, | GM, | HR, | ΗU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KP, | KR, | ΚZ, | LC, |
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| | | KW: | | | | | | | MZ, TM, | | | | | | | | | |
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| TG | | | •••, | ., | , | , | | | U, | ωι, | ٠, | UQ, | U#, | , | , | , | ы, | , |
| | ΑU | 2003 | 2983 | 43 | | | | | | | | | | | | | | |
| | ΕP | 1569 | | | | | | | 0907 | | | | | | | | 0031 | |
| | | R: | | | | | | | FR, | | | | | | | | | PT, |
| | | | | | | | | | MK, | | | | | | | | | |
| | BK | 2003 1726 | 104 | 0 / | | A | | 2005 | 1011 | | | 003- | | | | | 0031 | |
| | | 2006 | | 24 | | ~ | | 2000 | 0125 | / | | 005- | | | | | 0031 | |
| | | 2006 | | | | | | | | | | 005- | | | | | 0050 | |
| PRIO | | APP | | | | | | | | | | 002- | | | | | 0021 | |
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| | | | | | | | | | | \ | CH 2 | 003- | 1113 | / | 1 | A 2 | 0030 | 625 |
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| | | | | | | | | | | | EP 2 | 003- | 1022 | 97 | , | A 2 | 0030 | 725 |
| | | | | | | | | | | | wa 2 | 003- | P 0 5 A | 027 | | # 2 | 0031 | 202 |
| | | | | | | | | | | | 2 | 003- | LF30 | ,,, | , | - 4 | 0031 | 203 |

OTHER SOURCE(S): MARPAT 141:71355

ANSWER 6 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Described are aminohydroxybenzophenonecarboxamide derivs. of formula (I) [wherein R1, R2 = independently C1-20 alkyl, C2-20 alkenyl, C3-10 cycloalkyl, C3-10 C3-20 expolakenyl, Or R1 and R2 together with the linking nitrogen atom form a 5- or 6-membered heterocyclic ring; n1 =

1-4;
when n1 = 1, R3 = saturated or unsatd. heterocyclic radical,
hydroxy-C1-C5
alkyl, cyclohexyl optionally substituted with one or more C1-5 alkyl, Ph
optionally substituted with a heterocyclic radical, aminocarbonyl, C1-5
alkylcarboxy; when n1 = 2, R3 = alkylene, cycloalkylene or alkenylene
radical which is optionally substituted by a carbonyl or carboxy group;

R3 together with A forms a bivalent radical of the formula 0; wherein n2

1-3; when nl = 3, R3 = alkanetriyl radical; when nl = 4, R3 = alkanetetrayl radical; R = 0, N(R5); R5 = H, C1-5 alkyl, hydroxy-C1-5 alkyl]. These compds. are useful as UV filters in sunscreen applications, preferably for the protection of human and animal hairs and from the damage of UV radiation as well as cosmetic compns. comprising these compds. Thus, a solution of 10.6 g 3-diethylaminodibenzooxepin (preparation given) in 20 mL diethylene glycol

e
ether was added to a suspension of 7.2 g 2-(4-aminophenyl)-6methylbenzothiazole are suspended in 60 mL diethylene glycol di-Me ether
at room temperature under stirring, heated to 90°, and allowed to react
for 4 h to give 7.3 g N-[4-(6-methylbenzothiazol-2-yl)phenyl]-2-(4diethylamino-2-hydroxybenzoyl)benzamide.
5809-23-4, 2-(4-Diethylamino-2-hydroxybenzoyl)benzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of amino substituted hydroxyphenyl benzophenone derivs.

UV absorbers in sunscreen applications) 5809-23-4 CAPLUS

Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 - ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:484164 CAPLUS COCUMENT NUMBER: 141:379884 ...
TITLE: Synthesis and characterization Synthesis and characterization of chromogenic fluoran

Synthesias an containing 4-ketoon of chromogenic fluoria compounds of containing 4-ketoon architecture models are patch, Ritesh of Chemistry, Sardar Patch University, Vallabah Vidyanagar, 388 120, India Nulvariaty of the Serbian Chemical Society (2004), AUTHOR(S): CORPORATE SOURCE: SOURCE:

327-333 CODEN: JSCSEN: ISSN: 0352-5139 Serbian Chemical Society Journal

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

English CASREACT 141:379884

OTHER SOURCE(S):

EtoN

AB Chromogenic fluoran compds. containing 4-ketoquinazolinone I (R = H, NO2, R1 = R1 = Me, Ph, CH2Cl, and Bn, R2 = R3 = H; R = H, NO2, R1 = Me, R2 = NO2, R3 = Cl) were synthesized by reacting 2-(4-diethylamino-2-hydroxybenzoyl)benzoic acid with various substituted 4-ketoquinazolinones II in the presence of sulfuric acid. The 4-ketoquinazolinones were obtained by reacting various substituted benzoxazin-4-ones with 4-aminophenol or 2-nitro-p-anisdine. All the synthesized derivs. were identified by conventional methods, such as mp, elemental anal., IR, IH-NNR, and UV-visible spectroscopy in organic solvent and 95 % acetic acid. All the fluoran compds. develop color on contact with

or electron-accepting compds.

5809-23-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

L18 ANSWER 8 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2004:60350 CAPPLUS
DOCUMENT NUMBER: 140:111845
TITLE: UV light absorb. Trobetton UV light absorbing polysiloxanes for use in sunscreen compositions on Schultz, Matja: Huber, Ulrich DSM IP ASSETS B.V., Neth. PCT Int. Appl., 33 pp. CODEN: PIXXD2 INVENTOR (S):
PATENT ASSIGNEE (S DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| | | NO. | | | | | | | | | | | | | | ATE | |
|--------|------|--------------|------|-----|-----|-----|------|------|-----|------|-------|------|-----|-----|-----|------|------|
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| WO | | 0075 | | | | | | | | | | | | | | | |
| | w: | ΑE, | AG, | AL, | AM, | ΑT, | ΑU, | ΑZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | ·CN, |
| | | co, | CR, | CU, | CZ, | DE, | DK, | ĎΜ, | DZ, | EC, | . EE, | ES, | FI, | GB, | GD, | GE, | GH, |
| | | GM, | HR, | ΗU, | ID, | IL, | IN, | ÍS, | JP, | KE, | KG, | KP, | KR, | KZ, | LC, | LK, | LR, |
| | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN. | MW, | MX. | MZ, | NI, | NO, | NZ, | OM, |
| | | PH. | PL. | PT. | RO, | RU, | SC. | SD. | SE. | SG. | SK, | SL. | TJ. | TM. | TN. | TR. | TT. |
| | | | | | | | | | | | ZM, | | | | | | |
| | RW: | GH, | | | | | | | | | | | ZM. | ZW. | AM. | AZ. | BY. |
| | | | | | | | | | | | CH, | | | | | | |
| | | | | | | | | | | | NL, | | | | | | |
| | | | | | | | | | | | GW, | | | | | | |
| B.I.I | 2002 | 2228 | | | | | | | | | | | | | | | |
| | | 798 | | | | | | | | | | | | | | | |
| LP | | | | | | | | | | | | | | | | | |
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| CN | 1668 | 675 | | | A | | 2005 | 0914 | | CN 2 | 003~ | 8167 | 94 | | 2 | 0030 | 509 |
| JP | 2005 | 5331 | 41 | | T | | 2005 | 1104 | | JP 2 | 004- | 5203 | 66 | | 2 | 0030 | 509 |
| IN | 2004 | 5331 CN03 | 081 | | Α | | 2006 | 0217 | | IN 2 | 004- | CN30 | 81 | | 2 | 0041 | 231 |
| US | 2006 | 1609 | 76 | | A1 | | 2006 | 0720 | | US 2 | 005- | 5216 | 29 | | 2 | 0050 | 930 |
| IORITY | APP | LN. | INFO | .: | | | | | | EP 2 | 002- | 1584 | 9 | i | A 2 | 0020 | 716 |
| | | | | | | | | | | WO 2 | 003- | EP48 | 92 | , | w 2 | 0030 | 509 |

Functionalized trimethylsilyl-terminated polysiloxanes comprise in arbitrary order (a) 2-200 elements of the formulas -OSi(CH3)[CH(CH3)R1]-, -OSi(CH3)[CH2CH2-R1]-, -OSi(CH3)[CH2CH3-R1]-,

Rel is a UV light-absorbing group, (b) 2-200 elements of the formulas -OSi(CH3)[CH(CH3)R2]-, -OSi(CH3)(CH2CH2-R2)-, -OSi(CH3)[C(H2CH2-R2)-, -OSi(CH3)[C(H2CH2-R2)-, -OSi(CH3)[C(H2CH2-R2)-, Where R2 is hydrogen or a lipophilic group, (c) optionally, 1-100 elements of the formulas -OSi(CH3)[CH(CH3)R3]-, -OSi(CH3)[CH2CH2-R3]-, -OSi(CH3)[CH2CH2-R3]-, OSi(CH3)[CH2CH2-R3]-, Where R3 is a group able to form indic or hydrogobonds, and (d) optionally, 1-20 elements of the formula -O-SiH(CH3)-. hydrogen

UV light-absorbing polysiloxanes are used in sunscreen compns. for protection of human skin and/or hair. Thus, a UV light-absorbing polysiloxane was produced by hydrosilylation reaction between trimethylsilyl-terminated polymethylsiloxane (PS 118) and n-Bu vinyl ether and 2-{4-prop-2-ynyloxyphenyl)benzoxazole. \$509-23-4, 2-(4-plethylamino-2-hydroxybenzoyl)benzoic acid RL: RCT (Reactant); RACT (Reactant or reagent) (production of UV light-absorbing polysiloxanes for use in sunscreen compns.)

L18 ANSWER 7 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

(Reactant or reagent)

(prepn. of [diethylamino(hydroxy)benzoyl]benzoic acid as a starting material to fluorens via condensation of diethylaminophenol with phthalic anhydride)

RN 5809-23-4 CAPLUS

CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

REFERENCE COUNT:

FORMAT

THERE ARE 16 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

ANSWER B OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN 5809-23-4 CAPLUS Benzoic acid, 2-[4-(diethylapino)-2-hydroxybenzoy no)-2-hydroxybenzoyl]- (CA INDEX NAME) used to make REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT 3/16/02 40 9 00 =

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L18 ANSWER 9 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
139:327930
Organosilicone derivatives of amino hydroxybenzophenones and their use as UVA filters in cosmetic preparations
Berg-Schultz, Katja: Huber, Ulrich Roche Vitamins A.-G., Switz.

DOCUMENT TYPE:
LANGUAGE:
DAMILY ACC. NUM. COUNT: 1
 DOCUMENT TYPE:
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
         PATENT NO.

WO 2003086340 Al 20031023

W: AE, AG, AL, AM, AT, AU, AZ, BA
CO, CR, CU, CZ, DE, DK, DM, DZ
GM, HR, HU, ID, II, IN, IS, JF
LS, LT, LU, LV, MA, MD, MG, MF
PH, PL, PT, RO, RU, SC, SD, SF
TZ, UA, UG, US, UZ, VC, VN, Y'
RN: GH, GM, KE, LS, MW, MZ, SD, SC, KG, KZ, MD, RU, TJ, TW, AT, B
FI, FR, BG, GR, HU, IE, IT,
BF, BJ, CF, CG, CI, CM, GA, CA
AU 2003226709 Al 20031027
EP 1494642 Al 20050112
R: AT, BE, CH, DE, DK, ES, FR,
IE, SI, LT, LV, FI, RO, MK,
BR 2003009195 A 20050207
CN 1646091 A 2005539099
T 20051242
Al 2005111V
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                                                                                                                                                                                                                                               APPLICATION NO.
                                                                                                                                                                                                                                                                                                                                                                          DATE
                                                                                                                                                                                                                                                                                                                                                                           20030325
                                                                                                                                                                                                                                               WO 2003-EP3095
                                                                                                                                    A1 20031023 W0 2003-EP3095 20030325
AM, AT, AU, AZ, BA, BB, BB, BR, BY, BZ, CA, CH, CM,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
ID, II, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LK,
LV, MA, MD, MG, MK, NM, MW, MX, MZ, NI, NO, NZ, OM,
RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,
US, UZ, VC, VN, YU, ZA, ZM, ZW
LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
CG, CI, CM, GA, GN, GQ, GW, MLM, NE, SN, TD, TG
A1 20031027 A1 2003-226709 20030325
A1 20050112 EP 2003-746279 20030325
DE, DK, ES, FR, GB, GR, LT, LI, LU, NL, SE, MC, PT.
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NL, SE, MC, PT,
EE, HU, SK
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AL, TR. BG. CZ.
                                                                                                                                                                                                                                            AL, TR, EC, C
BR 2003-9195
CN 2003-808320
JP 2003-583364
US 2005-511020
EP 2002-8419
 PRIORITY APPLN. INFO.:
                                                                                                                                                                                                                                                 WO 2003-EP3095
                                                                                                                                                                                                                                                                                                                                                          W 20030325
                        The present invention relates to organosilicone derivs. of amino hydroxybenzophenones, a process for their preparation, a commetic compns. comprising the organosilicone derivative and the use thereof for eacting hair and/or skin from damage caused by UVA irradiation 5809-23-4, 2-(4-Diethylamino-2-hydroxybenzoyl)-benzoic acid RL: RCT (Reactant): RACT (Reactant or reagent) (preparation of organosilicone derivs. of amino hydroxybenzophenones
```

sunscreen against UVA radiation for cosmetics)

5809-23-4 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2003:830446 CAPLUS DOCUMENT NUMBER: 140:362521 TITLE: Preparation of amino substitute

Preparation of amino substituted hydroxyphenyl benzophenone derivatives and their uses as UV filters in sunscreen formulations

AUTHOR(S): CORPORATE SOURCE: SOURCE: IPCOM000018721D)

Nion. USA IP.com Journal (2003), 3(8), 40 (No.

, 4 Aug 2003 CODEN: IJPOBX; ISSN: 1533-0001 IP.com, Inc. Journal; Patent English

PUBLISHER: DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. IP 18721D PRIORITY APPLN. INFO.: 20030804 IP 2003-18721D 20030804

Described are synthesis of amino substituted hydroxyphenyl benzophenone derivs. The compds. are useful as UV filters in sunscreen applications. For example, comound I synthesized by reacting anhydrous 4-diethylamino 2-hydroxy benzophenone carboxylic acid with 2,2-dimethyl-1,3-propanediol was found to be a good UV absorber and was incorporated into sunscreen formulations. 5809-23-4
RL: RCT (Reactant); RACT (Reactant or reagent).

their uses as UV filters in sunscreen formulations)
5809-23-4 CAPIUS
Benzola ecid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 9 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

REFERENCE COUNT: THIS

THERE ARE 11 CITED REFERENCES AVAILABLE FOR RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

Same on 41+8

L18 ANSWER 10 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

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L18 ANSWER 11 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:
                                                                                                                                         LUS - 00*PARSHIP 2007 ACS ON STN
2002:714121 CAPLUS
137:237454
Use of sunscreen combinations in cosmetic and
                                                                                                                                      pharmaceutical preparations
Heidenfelder, Thomas; Tiefensee, Kirstin; Wuensc
   INVENTOR (S):
                                                                                                                                             homas
DSF Aktiengesellschaft, Germa
  PATENT ASSIGNEE(S):
SOURCE:
                                                                                                                                      Eur. Puc. Appl 27 pp
CODEN: EPXXDW
Patent
  DOCUMENT TYPE:
   LANGUAGE:
                                                                                                                                      German
   FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                                                                                                                                                         DATE V
                              PATENT NO.
                                                                                                                                      KIND
                                                                                                                                                                                                                                           APPLICATION NO.
                                                                                                                                                                                                                                                                                                                                                                   DATE
                                                                                                                                                                         20020918
                              EP 1240894
EP 1240894
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A3
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DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, LV, FI, RO, MK, CY, AL, TR
A1 20020919 DE 2001-10113058 20010315
A1 20021203 US 2002-95224 20020312
B2 20021219
                                               R: AT, BE, CH,
IE, SI, LT,
                          DE 10113058
US 2002192167
US 6488915
                                                                                                                                                                                                                                        JP 2002-69215
AU 2002-24613
BR 2002-839
CN 2002-107541
DE 2001-10113058
                               JP 2002308761
A0 2002024613
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A5
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                              BR 2002000839
                                                                                                                                                                            20030325
                                                                                                                                                                                                                                                                                                                                                                    20020314
  CN 1382433
PRIORITY APPLN. INFO.:
                                                                                                                                                                           20021204
OTHER SOURCE(S): MARPAT 137:237454

The invention concerns cosmetic and pharmaceutical prepns. that contain combinations of UV-A and UV-B sunscreens; UV

A screens are from the group of 2-(4-alkoxy-anilinomethylene)-malonic acid esters; UV-B screens are from the group of hydroxybenzophenone derivs., dlarylbutadienes, 1,3,5-triazine derivs., benzotriazole derivs. siloxanes, benzimidazole derivs., and benzophenone derivs. Thus a lipstick preparation contained (weight/weight%):
2-(4-alkoxy-anilinomethylene)-malonic acid ester 5.00; hydroxybenzophenone derivative 8.00; titanium dloxide 10.00; zinc oxide 5.00; castor oil 4.00; pentaerythrityl/stearate/caprate/caprylate adipate 4.00; Glyceryl

Stearate
pentaerythrityl/stearate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/caprate/capra
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L18 ANSWER 11 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CO2H
OH
OH

Palat
Spec
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L18 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN

ACCESSION NUMBER:
DOCUMENT NUMBER:
TITLE:

Mixtures of photoprotectants comprising
aminohydroxybenzophenones in cosmetics and
pharmaceuticals
INVENTOR(S):

Heidenfelder, Thomas; Habeck, Thorsten; Wuens Thomas
Basf Aktiengeselischart,
Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
Patent PATENT ASSIGNEE(S): SOURCE: DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. KIND DATE / APPLICATION NO. APPLICATION NO. DATE

A2 20010919 EP 2001-104958 20010301
A3 20040102
DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
LV, FI, RO
A1 20010920 DE 2000-10012408 20000315
A1 20020103 US 2001-805727 20010307
B2 20020514
A 20010926 JP 2001-70070 20010313
A 20011026 BR 2001-1085 20010315
A 20011205 DR 2001-116869 20010315
A 20011205 DE 2000-1012408 A 20000315 EP 1133980
EP 1133980
R: AT BE, CH,
IE, SI, LT,
DE 10012408
US 2002001570
US 6387355
JP 2001261540
BR 2001001085
CN 1324610
PRIORITY APPLN. INFO.: JP 2001-70070 BR 2001-1085 CN 2001-116869 DE 2000-10012408 R SOURCE(s): MARPAT 135:247019 Mixts. of photoprotectants comprise hydroxybenzopheneones, 4,4'-diarylbutadienes, dibenzoylmethanes, triazines, benzotriazoles, and have UVA radiation absorbing properties. Thus, a sunscreen osition contained octyl methoxycinnamate 10.00, ethoxylated hydrogenated castor oil 6.50, micronized TiO2 6.00, a sunscreen (mixture of hydroxybenose, triazines and bengotriazoles) 5.00, mineral oil 5.00, isoamyl p-methoxycinnamate 5.00, propylene glycol 5.00, jojoba oil 3.00, 4-methylbenzylidenecamphor 3.00, PEG/dodecyl glycol polymer 2.00, dimethicone 1.00, tocopheryl acetate 0.50, phenoxyethanol 0.50, EDTA 0.20. and water to 100%.
67414-64-65, derivs.
RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(mixts. of photoprotectants comprising aminohydroxybenzophenones in cosmetics and pharmaceuticals) 67414-64-6 CAPLUS
Benzoic acid, 2-(4-amino-2-hydroxybenzoyl)- (9CI) {CA INDEX NAME}

L18 ANSWER 12 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

L18 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2001:681753 CAPLUS DOCUMENT NUMBER: 136:201770 Syntheses and properties of di Syntheses and properties of diphenylaminophthalide Syntheses and properties of diphenylaminophthalide derivatives
Nagao, Yukinori; Tachikawa, Masashi; Kozawa, Kozo
Dep. Industrial Chem., Sci. Univ. Tokyo, Noda-shi,
Chiba, 278-8510, Japan
Shikizai Kyokaishi (2001), 74(7), 339-345
CODEN: SKVOAO; ISSN: 0010-180X
Shikizai Kyokai
Journal AUTHOR(S): CORPORATE SOURCE: SOURCE: PUBLISHER: DOCUMENT TYPE: MENT TYPE: Journal

JAGES Japanese

R SOURCE(S): Japanese

R SOURCE(S): CASREACT 136:201770

Diphenylaminophthalide derivs. were synthesized and their properties as color formers were investigated. Condensation of benzoyl benzoic acids and outprival aminophthalide derivs. having substituents of 4-R2 and 4-R3 in diphenylaminophthalide derivs. having substituents of 4-R2 and 4-R3 in diphenylaminophthalide derivs. having substituents of 4-R2 and 4-R3 in diphenylaminophthalides were colored red to reddish violet in acidic solvent. The visible absorption spectra were measured for the investigation of the substituent effect. R2 and R3 substituents gave a bathochromic shift of the \(\lambda \text{max} \text{ in the order of diethylamino} \rangle \) dimethylamono \(\rangle \text{ thorax} \rangle \text{ X} \) substituent provided a hypsochromic shift of \(\text{ max} \text{ in the order of ethoxy} \rangle \text{ N} \text{ Y substituent provided a hypsochromic shift increased with increasing electron donating ability of \(\text{ R2} \) and \(\text{ R3} \) substituents, and the hypsochromic shift increased with increasing electron-donating ability of \(\text{ Substituent} \). PPP-MO calcn. Journal OTHER SOURCE (S): also gave a reasonable explanation for the substituent effect.
5809-23-4 24460-11-5, Benzoic acid, 2-{4-(dimethylamino}-2-hydroxybenzoyl)RL: RCT (Reactant); RACT (Reactant or reagent)
(syntheses and properties of diphenylaminophthalide derivs.)
5809-23-4 CAPLUS
Benzoic acid, 2-{4-(diethylamino)-2-hydroxybenzoyl}- (CA INDEX NAME) IT

24460-11-5 CAPLUS
Benzoic acid, 2-[4-(dimethylamino)-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 14 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
133:325468
Aminohydroxybenzophenones as photostable UV
filters in cosmetic and pharmaceutical preparations
Habeck, Thorsten; Prechtl, Frank; Wunsch, Thomas;
Westenfelder, Horst; Haremza, Sylke; Bach, Thorsten;
Spiegel, Anja
Basf Aktlengesellschaft, Germany
CODENT TYPE:
DOCUMENT TYPE:
DOCUMENT TYPE:
DATENT INFORMATION:
PATENT INFORMATION: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: PATENT NO. DATE APPLICATION NO. 20041015 20050131 20050416 20001121 20001026 20040520 20001115 20020625 20041215 CN 2000-106860 US 2000-553897 20000420 -105 20000420 20000420 A 19990420 EP 2000-105806 A3 20000318

OTHER SOURCE(S):

Aminohydroxybenzophenones (I, e.g., R1, R2 = H, C1-20 alky1, C2-20 alkeny1, and NR1R2 = 5- or 6-membered ring; R3, R4 = C2-20 alkeny1, X =

MARPAT 133:325468

CO2H) are prepared and used as photostable UV filters in cosmetic (or hair prepns.) and pharmaceutical prepns. Thus, a sunscreen cream contained octyl methoxycinnamate 8.00, micronized TiO2 8.00, hydrogenated

L18 ANSWER 13 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L18 ANSWER 14 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) ethoxylated castor oil 8.00, I 5.00, mineral oil 6.00, ZnO 5.00, iso-Pr myristate 5.00, imidazolidinylurea 0.30, jojoba oil 3.00, PEG45 dodecyl glycol copolymer 2.00, 4-methylbenzylidenecamphor 1.00, Mg stearate 0.60, tocopheryl acetate 0.50, methylparaben 0.25, disodium EDTA 0.20, and propylparaben 0.15 and water to 1004

IT 5809-23-4F 49742-68-9F 54574-82-2P
RL: BUU (Biological use, unclassified): PRP (Properties): SPN (Synthetic preparation): THU (Therapeutic use): BIOL (Biological study): PREP (Preparation): USES (Uses) (aminohydroxybenzophenones as photostable UV filters in cosmetic and pharmaceutical prepns.)

RN 5809-23-4 CAPLUS
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

49742-68-9 CAPLUS
Benzoic acid, 2-{2-hydroxy-4-{1-pyrrolidinyl}benzoyl}- (9CI) (CA INDEX

54574-82-2 CAPLUS Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1998:239672 CAPLUS COPYRIGHT 2007 ACS ON STN 1998:239672 CAPLUS CAPLUS

DOCUMENT NUMBER: TITLE:

INVENTOR (S) PATENT ASSIGNEE(S): SOURCE: 129:29099
Fluoran dyes and coloring recording materials
therefrom with good retention of background whiteness
Yanaida, Mitsuhiro; Kawabe, Toru; Sakamoto, Yasuko
Nippon Soda Co., Ltd., Japan
Jpn. Kokal Tokkyo Koho, 10 pp.
CODEN: JKKXAF

DOCUMENT TYPE: Patent Japanese

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. JP 10101949 PRIORITY APPLN. INFO.:

APPLICATION NO. KIND DATE DATE А 19980421 JP 1996-280378 JP 1996-280378 19960930

OTHER SOURCE(S):

MARPAT 129:29099

$$\mathbb{R}^{1-\frac{1}{N}} \stackrel{\mathbb{R}^{3}}{\underset{\mathbb{R}^{2}}{\bigcap}} \stackrel{\mathbb{R}^{3}}{\underset{\mathbb{R}^{2}}{\bigcap}} \stackrel{\mathbb{R}^{4}}{\underset{\mathbb{R}^{2}}{\bigcap}} \stackrel{\mathbb{R}^{4}}{\underset{\mathbb{R}^{2}}{\bigcap}} \stackrel{\mathbb{R}^{4}}{\underset{\mathbb{R}^{2}}{\bigcap}}$$

The title dyes (I; R1, R2 = C1-20 alkyl, R3 = C1-8 alkyl; R4 \approx C1-4

l, halo; n = 0-3; A = C1-4 alkyl, halo, NHC6H4R5; R5 = C1-4 alkyl, halo) having good lightfastness are claimed. Coloring recording materials containing I are also claimed. Thus, 36.6 g 3-[N-[4]-(N,N-dimethylamino)phenyl]amino)methoxybenzene reacted with 7.3 g NaOH at 90° in DNSO and then with 25.9 g EtI at coom temperature to give 3-[N-ethyl-N-[4]-(N,N-dimethylamino)phenyl]amino]methoxybenzene, 10.0 g

which reacted with 6.0 g phthalic anhydride at 40-50° in C2C14 in the presence of AlC13 and neutralized with H2SO4 to give 2-[4'-[N-ethyl-N-[4"-(N,-dimethylamino)phenyl]]amino-2'-methoxy]benzoylbenzoic acid (II). II (5.5 g) reacted with 4.5 g 2-methyl-4-hydroxydiphenylamine at room temperature and purified to give

fluoran compound I (R1 = R2 = R4 = Me, R3 = Et, A = NHPh) (III) (m.p. 220-2227). Thermal printing paper using III showed optical d. (Wacbeth value) 1.22 initially and 0.62 after 24-h UV irradiation,

L18 ANSWER 15 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) while the paper using 2-anilino-3-methyl-6-dibutylaminofluoran (control) showed 1.32 initially and 0.30 after the irradn.

IT 207446-19-3P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

RACT

(Reactant or reagent)
(preparation of fluoran dyes for coloring printing materials with good lightfastness)

RN 207446-19-3 CAPLUS

SBenzoic acid,
2-[4-[4-(4-(dibutylamino)phenyl]ethylamino]-2-hydroxybenzoyl](9CI) (CA INDEX NAME)

RACT

L18 ANSWER 16 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
1597:719524 CAPLUS
1997:719524 CAPLUS
128:68388
128:68388
130 NMR and Electronic Absorption Spectroscopic
Studies on the Equilibrium between the Colorless
Lactone and the Colored Zwitterion Forms of a
Fluoran-Based Black Color Former
Yangita, Mitsuhiro: Aoki, Izuo; Tokita, Sumio
Nippon Soda Co., Ltd., 12-54, Goi-minamikaigan,
Ichinara, Chiba, 290, Japan
SOURCE:
BUBLISHER:
DOCUMENT TYPE:
DOCUMENT TYPE:

1997:719524 CAPLUS
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I

Journal English

PUBLISHER: DOCUMENT TYPE: LANGUAGE: GI

AB The equilibrium between the coloriess recommend (2) forms of the fluoran compound (1), which has been widely used as a typical black color former in data-recording systems, has been studied by 13C NMR and electronic absorption spectroscopies. The compound I showed

visible absorption in aprotic solvents, while a black color appeared in phenolic solvents. The 13C NMR and signal of the spiro carbon of in CDC13

appeared at 84.2 ppm, indicating that I exists substantially as L in appeared at 84.2 ppm, indicating that I exists substantially as L in appeared in the sp2-hybridization region (8 = 162.7), suggesting that in phenol-d6, cleavage of the C(spiro)-O bond in the lactone ring occurs and that the ring-opened Z form is produced. The equilibrium between L and Z depended strongly on the temperature and solvents. The high temperature and inhibition of the solvent interaction by steric hindrance, self-association and intramol. chelation of the solvent shifted the L-Z equilibrium toward L. The

thermodn. parameters for the equilibrium reaction in phenolic solvents

also estimated
54574-82-2, 2-(4-Dibutylamino-2-hydroxybenzoyl)benzoic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with methoxymethylphenylaniline in sulfuric acid solution)
54574-82-2 CAPLUS
Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 16 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

REFERENCE COUNT:

FORMA?

THERE ARE 25 CITED REFERENCES AVAILABLE FOR

RECORD. ALL CITATIONS AVAILABLE IN THE RE

L18 ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:600590 CAPLUS
DOCUMENT NUMBER: 105:200590
I 105:200590
I 105:200590
Recording material
Satomura, Masato; Iwakura, Ken; Igarashi, Akira
PATENT ASSIGNEE(S): Ger. Offen., 25 pp.
COODE: GWXXBX
DOCUMENT TYPE: COOR: GWXXBX
PATENT INFORMATION:
FAMILIF ACC. NUM. COUNT: German
PATENT INFORMATION:

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|------------------|-----------|
| | | | | |
| DE 3529796 | A1 | 19860522 | DE 1985-3529796 | 19850820 |
| JP 61051381 | A | 19860313 | JP 1984-173591 | 19840821, |
| JP 61280457 | A | 19861211 | JP 1985-123167 | 19850606 |
| PRIORITY APPLN. INFO.: | | | JP 1984-173591 A | 19840821 |
| | | | | |

JP 1985-123167 A 19850606

GI

Pressure-sensitive and thermal recording materials having improved color developability and developed color image stability contain a fluoran derivative I (R = aryl; R1 = C10-18 alkyl, R2 = C510 alkyl; R3 = H, halogen, C1-6 alkyl, C1-6 alkoxy, C7-12 aralkyl, C6-9 aryl; R4 = H, C1,

Cl-4 alkyl) and an organic or inorg. acid which develops a color on

C1-4 alkyl) and an organic or inorg, acid which develops a contact with the fluoran derivative Thus, a mixture containing a ball-milled dispersion (particle size 1.6 µm) of 2-anilino-3-phenyl-6-N-dodecyl-N-ethylaminofluoran 5 g and a 5% aqueous solution of poly(vinyl alc.), a ball-milled dispersion (particle size 1.5 µm) of Bisphenol A 10, β-naphthol benzyl ether 10, kaolin 20 g, and a 5% aqueous solution poly(vinyl alc.), a 50% dispersion of a paraffin wax emulsion 5, and a stearic acid anisidide dispersion 8 g was coated on a paper support at 5 g/m2, dried, and recorded on at 35 m3/cm2 to give a color d. of 1.03. After exposure to light from a UV lamp for 1 h, the d. was essentially unaltered.

L18 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1986:43227 CAPLUS
COCUMENT NUMBER: 104:43227
Recording material
PATENT ASSIGNEE(S): CODEN: JRXXAF
DOCUMENT TYPE: LANGUAGE: Patent
LANGUAGE: Japanese
FAMILY ACCENTUM. COUNT: 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| JP 60112483 | A | 19850618 | JP 1983-221239 | 19831124 |
| PRIORITY APPLN. INFO.: | | | JP 1983-221239 | 19831124 |
| | | | | |

A recording material contains a fluoran derivative having an arylamino

roup
at the 7'-, an aralkyl group at the 6'-, and an amine residue at the
3'-position of the fluoran nucleus. The fluoran derivative provides good
color-forming behavior and image stability. Thus,
-benzyl-4-nitroanisole
{prepared by the Grignard reaction of PhCH2Br and p-nitroanisole) was
hydrogenated over Pd-C to obtain 2-benzyl-4-methoxyaniline, which was
hen

hydrogenated over Pd-C to obtain 2-benzyl-4-methoxyaniline, which was then acetylated. The obtained anilide was treated with Cu powder and PhI to form 2-benzyl-4-methoxy-N-acetyldiphenylamine, which was deacetylated to 2-benzyl-4-methoxydiphenylamine. Its reaction with 2-(2-hydroxy-4-diethylaminobenzoyl)benzoic acid gave the corresponding phthalide, which was then treated with NaOH to obtain 7'-phenylamino-6'-benzyl-3'-diethylaminofluoran 1). I 6 and 7'-phenylamino-6'-methyl-3'-(N-ethyl-N-cyclohexylamino)fluoran 3 g were dispersed in 5t poly(vinyl alc.) 50 mL, and the dispersion was mixed with another dispersion containing Bisphenol A 10, kaolin 20, β-naphthol benzyl ether 14 g, and 5t poly(vinyl alc.) 100 mL. The mixture was then added to a paraffin emulsion and stearyl anisidide and coated on plain paper. The image d. obtained by heating using 3 mJ/cm2 was 1.00, which was hardly affected by 1 h UV irradiation IT 5809-23-4 54574-82-2 RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with diphenylamine derivs.)
RN 5809-23-4 CAPLUS CN Benzolc acid; 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

54574-82-2 CAPLUS
Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

ANSWER 17 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 105176-19-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and cyclization of) 105176-19-0 CAPLUS Benzolc acid, 2-[4-(ethyloctadecylamino)-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L18 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 1986:13106 CAPLUS 104:13106 THERMS 104:13106 THERMS 1986:13106 CAPLUS 104:13106 THERMS 1996:13106 THERMS 1996:13106 CAPLUS 104:13106 THERMS 1996:13106 CAPLUS 104:13106 CAPLU

Japanese 1

DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE JP 60105581 PRIORITY APPLN. INFO.: JP 1983-213761 JP 1983-213761 19831114 19831114 19850611

AB A thermal recording material contains a phenol derivative and a fluoran derivative

having an anilino group at the 7'-position and an amino group at the 3'-position. The claim also includes similar materials containing a heat-melting material having a m.p. of 70-120'. The material has good color-forming properties and provides storage-stable images. Thus, 7'-anilino-6'-ethyl-3'-diethylaminofluoran 5 g was dispersed in 5% poly(vinyl alc.) 50 mL, mixed with another dispersion containing Bisphenol A

10, β -naphthol benzyl ether 10, kaolin 20 g, and 5% poly(vinyl alc.) 100 mL, further mixed with a 50% aqueous dispersion of a paraffin wax 5

a dispersion containing stearic acid anisidide θ g, and coated on plain

r
to form a 5 g/m2 layer. Tests in a facsimile device gave an image d. of
1.20, which was hardly affected by UV irradiation
5809-23-45 54574-82-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with ethylmethoxydiphenylamine)
5809-23-4 CAPLUS

Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

54574-82-2 CAPLUS Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl}-

L18 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1985:624475 CAPLUS DOCUMENT NUMBER:

ACCESSION NUMBER:

103:224475
Thermal recording material
Fuji Photo Film Co., Ltd., Ja
Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: UKXXAF
Patent
Japanese 1
1 TITLE: PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 60105583 PRIORITY APPLN. INFO.: A 19850611 JP 1983-213763 JP 1983-213763 19831114

Japan

AB A thermal recording material contains a fluoran derivative having an arylamino group at the 7', an amyl group at the 6', and an amino group at the 3' positions. The material has good color-forming properties and provides storage-stable images. Thus, 7'-phenylamino-6'-isoamyl-3'-dibutylaminofluoran 4 and 7'-phenylamino-6'-chloro-3'-diethylaminofluoran 5 g were dispersed in 5% poly(vinyl alc.) 50 mL, the dispersion mixed with

another dispersion containing Bisphenol A 10, Kaolin 20, β -naphthol benzyl ether 15 g, and 5% poly(vinyl alc.) 100 mL, then mixed with a emulsion containing a 50% paraffin wax emulsion 5 and stearic acid anisidide 8
g, and coated on plain paper to form a 5 g/m2 layer. An image of d. 1.22,

which was obtained in a facsimile device, was hardly affected by UV irradiation for 1 h. 5809-23-4 54574-82-2 RE. RCT (Reactant); RACT (Reactant or reagent) (reaction of, with isoamylmethoxydiphenylamine) 5809-23-4 CAPLUS Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

54574-82-2 CAPLUS
Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 19 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

L18 ANSWER 20 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

L18 ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 1985:551007 CAPLUS DOCUMENT NUMBER: 103:151007

Thermographic imaging material Fuji Photo Film Co., Ltd., Jap. Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF TITLE: PATENT ASSIGNEE (S): SOURCE:

DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 60097887 А 19850531 JP 1983-206581 19831102 PRIORITY APPLN. INFO.: JP 1983-206581 19831102

GI

Claimed imaging material contains a phenolic derivative and a fluoran of

formula I (R = a group containing an arylcarbonyl structure; R1, R2, R3

halo, alkyl; R4 = amine residue). The color image produced by the fluoran has high d. and outstanding image stability. Thus, a dispersion of 2-(o-phenacyloxycarbonyl)anilino-6-diethylaminofluoran in poly(vinyl)

aqueous solution and another dispersion of bisphenol A, kaolin and

p-phenylphenol
benzyl ether in poly(vinyl alc.) aqueous solution were mixed and added

emulsion of a paraffin wax. Then, the mixture was coated on a paper support

ort
to give a thermog. imaging sheet. High d. images with high UV
-light stability were obtained.
5809-23-4 54574-82-2
RL: USES (Uses)
(condensation of, with carboxymethoxydiphenylamine)
5809-23-4 CAPLUS

L18 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1985:195239 CAPLUS
DOCUMENT NUMBER: 102:195259
FIVE ACTION OF THE ACTIO

DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--------------------|------|----------|-----------------|----------|
| | | | | | |
| | JP 59188491 | A | 19841025 | JP 1983-64036 | 19830412 |
| | JP 04060035 | В | 19920924 | | |
| | GB 2140449 | Α. | 19841128 | GB 1984-9355 | 19840411 |
| | GB 2140449 | В | 19870304 | | |
| | US 4644377 ' | A | 19870217 | US 1984-599361 | 19840412 |
| PRIO | RITY APPLN. INFO.: | | | JP 1983-64036 A | 19830412 |

OTHER SOURCE(S): MARPAT 102:195259

AB The claimed fluoran derivs. have an arylamino group at position 2', a

chain alkyl at position 3', and a substituted amino group at position 6'. Also claimed are thermal recording materials using the above derivs. The fluoran derivs. are highly hydrophobic and soluble in organic solvents

produce real black color by contact with electron acceptors. The

uced black dyes are extremely stable. Thus, 4-amino-3-pentadecylphenol 0.11 mol was acetylated with Ac2O and methylated using Me2SO4. Reaction with PhI and Cu followed by hydrolysis gave 4-methoxy-2-pentadecyldiphenylamine, which was made to react with 2-(2-hydroxy-4-diethylamino)benzoylbenzoic acid in H2SO4 to obtain 2'-anilino-3'-pentadecyl-6'-diethylaminofluoran (1). I 20 and henylamino-3'-methyl-6'-dibutylaminofluoran 15 weight parts were dispersed with poly(vinyl).

alc.).

The dispersion was mixed with another dispersion containing Bisphenol A

nd stearylanisidide 30 weight parts and coated on plain paper to obtain a thermal recording material that gave real black images by heating. Neither the treatment at 40°, 90% relative humidity for 16 h nor irradiation by a UV lamp for 1 h discolored the images. 5809-23-4 54574-82-2 RE: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with methoxypentadecyldiphenylamine in preparation of

derivative for thermal recording materials)
5809-23-4 CAPLUS
Benzolc acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

ANSWER 21 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

54574-82-2 CAPLUS Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

(Continued) L18 ANSWER 22 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN

54574-02-2 CAPLUS Benzoic acid, 2-[4-(dibutylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

42530-36-9

RE: RCT (Reactant); RACT (Reactant or reagent) (reaction of, with phenylaminopentadecylanisole in preparation of

ran derivative for thermal recording materials) 42530-36-9 CAPLUS Benzoic acid, 2-[4-[ethyl(4-methylphenyl)amino]-2-hydroxybenzoyl]- (9CI) (CA INDEX NAME)

L18 ANSWER 23 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
1985:103690 CAPLUS
102:103690
Recording material
Fuji Photo Filim Co., Ltd., Japan
Jpn. Kokai Tokkyo Koho, 5 pp.
CODEN: JKXXAF
DOCUMENT TYPE:
LANGUAGE:
JAPANES

Japanese 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------------------------------|------|----------|--------------------------------|----------------------|
| JP 59142182 PRIORITY APPLN. INFO.: | Α | 19840815 | JP 1983-15928 JP 1983-15928 | 19830202 19830202 |

Claimed recording material contains (a) a fluoran derivative containing \$\beta\$-keto acylamino structure in the mol. and (b) a phenol derivative The combination provides a thermal or pressure-sensitive recording material with improved color-developing property and image stability. Thus, (1) 2-p-acetoacetylaminoanilino-3-methyl-6-diethylaminofluoran and poly(vinyl alc.) and (2) 2,2'-bis(4-hydroxyphenyl)propane and poly(vinyl alc.) were resp. milled, mixed together, and kaolin and emulsified paraffin wax were added to the mixture Then it was coated on paper support with the ing AB

coating weight of 6 g/m2. The thermorecording paper was color developed with a small

thermal energy to a d. of 1.0, and no color shift or fading was observed after 1-h UV exposure.

L18 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) emulsified at 50° in 12% pigskin gelatin 100 g. A 12% gum arabic soln. 100 g was added followed by water 200 mL at 50°. The emulsion was poured into ice water 600 g and stirred for 3 h to complete the coacervation. The resulting slurry was then coated on paper, dried, and the coated side of the paper contacted with a 2nd sheet coated with silton clay, attapulgite clay, or a phenolic resin to give a dark green image on application of pressure by writing.

IT 5809-23-4

DBU9-23-4
RE: RCT (Reactant); RACT (Reactant or reagent)
[reaction of, with anisidine derivs.]
S809-23-4 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

L18 ANSWER 24 OF 25 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 1983:25558 CAPLUS
DOCUMENT NUMBER: 98:25558
TITLE: Copying material employing fluc
INVENTOR(S): Garner, Robert; Petitplerre, Je
PATENT ASSIGNEE(S): Switz. 98:25558
Copying material employing fluoran color formers
Garner, Robert; Petitpierre, Jean C. Switz. U.S., 7 pp. Division of U.S. Ser. No. 944,219, SOURCE: abandoned. CODEN: USXXAM DOCUMENT TYPE: Patent English 2 FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

| ., | | | | | | | |
|------------------------|------|----------|------|---------------|----|----------|--|
| PATENT NO. | KIND | DATE | AP | PLICATION NO. | | DATE | |
| | | | | | | | |
| US 4349218 | A | 19820914 | US | 1979-81407 | | 19791003 | |
| GB 1459417 | A | 19761222 | GB | 1973-24079 | | 19730521 | |
| IT 1011470 | В | 19770120 | IT | 1974-51110 | | 19740520 | |
| US 4302393 | A | 19811124 | US | 1979-92830 | | 19791109 | |
| PRIORITY APPLN. INFO.: | | | GB | 1973-24079 | A | 19730521 | |
| | | | US | 1974-471269 | A1 | 19740520 | |
| | | | , US | 1976-670780 | A1 | 19760326 | |
| • | | | US | 1977-822477 | A2 | 19770808 | |
| | | | us | 1978-944219 | A3 | 19780920 | |
| | | | GB | 1974-24079 | А | 19740328 | |

OTHER SOURCE(S): MARPAT 98:25558

Fluorans (I: R-R3 = H, C1-12 alkyl, C2-8 alkoxyalkyl, or substituted Bz and \geq 1 of R-R3 is C6-12 alkyl) are described for use as color formers in both pressure-sensitive and thermal copying papers. These compds. produce an intense dark green color when contacted with an electron-accepting coreactant. Thus, a solution containing 2-{N-benzyl-N-octylaminoj-6-diethylaminofluoran 3 g in hydrogenated terphenyl 100 g was

L18 ANSWER 25 OF 25
ACCESSION NUMBER:
DOCUMENT NUMBER:
1974:520516 CAPLUS
1974:520516 CAPLUS
111LE:
AUTHOR(S):
CORPORATE SOURCE:
SOURCE:
Clayton Aniline Co. Ltd., Manchester, UK
Chemistry & Industry (London, United Kingdom) (1974),
(11), 453-4
CODEN: CHINAG; ISSN: 0009-3068
Journal

COEN: CHINAG; ISSN: 0009-3068

DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.

B Lanthanide-shifted NMR spectra of the reaction product of
4,2-(Et2N) (HO) C6H3-COC6H4CO2H-2 (I) with 6-hydroxyquinoline confirmed the
structure (II, R = X = H). Analogs (II, R = Me, X = H, and R = Me, X =
Cl) were also prepared and their NMR and uv spectra determined
Reaction of I with 3-(ethoxycarbonyl)-1-ethyl-2-methyl-5-hydroxyindole in
H2SO4 at <5° gave III (R = Et, Rl = COZEt) which was dearboxylated
at higher temps., giving III (Rl = H). The N-phenyl analogs (III, R =
Ph,

R1 = CO2 Et,H) were also prepared
5809-23-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with hydroxyquinolines and -indoles)
5809-23-4 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]- (CA INDEX NAME)

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                CA/CAplus Company Name Thesaurus enhanced and reloaded
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        JAN 16
                 IPC version 2007.01 thesaurus available on STN
                WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
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       JAN 16
NEWS
        JAN 22
                CA/CAplus updated with revised CAS roles
NEWS
     7
        JAN 22
                CA/CAplus enhanced with patent applications from India
                 PHAR reloaded with new search and display fields
NEWS 8
       JAN 29
NEWS 9
        JAN 29
                CAS Registry Number crossover limit increased to 300,000 in
                multiple databases
NEWS 10
        FEB 15
                 PATDPASPC enhanced with Drug Approval numbers
NEWS 11
        FEB 15
                RUSSIAPAT enhanced with pre-1994 records
NEWS 12
        FEB 23
                KOREAPAT enhanced with IPC 8 features and functionality
       FEB 26 MEDLINE reloaded with enhancements
NEWS 13
                EMBASE enhanced with Clinical Trial Number field
NEWS 14
        FEB 26
NEWS 15
       FEB 26
                TOXCENTER enhanced with reloaded MEDLINE
NEWS 16 FEB 26
                IFICDB/IFIPAT/IFIUDB reloaded with enhancements
NEWS 17 FEB 26 CAS Registry Number crossover limit increased from 10,000
                 to 300,000 in multiple databases
NEWS 18
        MAR 15
                WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 19
        MAR 16
                CASREACT coverage extended
NEWS 20
        MAR 20
                MARPAT now updated daily
        MAR 22
NEWS 21
                LWPI reloaded
NEWS 22
        MAR 30
                RDISCLOSURE reloaded with enhancements
NEWS 23
        MAR 30
                INPADOCDB will replace INPADOC on STN
NEWS 24
        APR 02
                JICST-EPLUS removed from database clusters and STN
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L1 1 682349-34-4/RN

=> s 682349-33-3/RN

L2 1 682349-33-3/RN

=> s 682349-32-2/RN

L3 1 682349-32-2/RN

=> s 682349-27-5/RN

L4 1 682349-27-5/RN

=> s 682349-26-4/RN

L5 1 682349-26-4/RN

=> s 682349-25-3/RN

L6 1 682349-25-3/RN

=> s 682349-24-2/RN

L7 1 682349-24-2/RN

=> s 682349-23-1/RN

L8 1 682349-23-1/RN

=> s 682349-22-0/RN

L9 1 682349-22-0/RN

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=> s 682349-16-2/RN
L10
             1 682349-16-2/RN
=> s 682349-29-7/RN
L11
             1 682349-29-7/RN
                                             13 species
=> s 682349-28-6/RN
L12
             1 682349-28-6/RN
=> s 682349-30-0/RN
L13
             1 682349-30-0/RN
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             1 L3
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             1 L6
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             5 L8
             2 L9
             2 L10
             1 L11
             1 L12
             1 L13
L14
               (L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9 OR L10 OR
              L11 OR L12 OR L13)
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=> D IBIB ABS HITSTR 1-5

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L14 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2006:76252 CAPLUS DOCUMENT NUMBER: 144:156199 Sunscreen cosmetic or dermat INVENTOR(S): Mueller, Stefan; Ehlis, Thom
                                                                                      144:196199
Sunscreen cosmetic or dermatological formulations
Mueller, Stefan; Ehlis, Thomas; Giesinger, Jochen;
Kreyer, Gilbert
Ciba Specialty Chemicals Holding Inc., Switz.
PCT Int. Appl., 45 pp.
CODEN: PIXXD2
Parent
PATENT ASSIGNEE(S):
SOURCE:
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DOCUMENT TYPE: Patent

LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English

| | PA? | PENT | NO. | | | | | | | | | | | | | | | |
|-----|-----|------|------|-----|-----|-----|-----|------|------|-----|------|------|------|-----|-----|-----|------|-----|
| | | | | | | | | | | | | | | | | | | |
| | WO | 200€ | 0082 | 52 | | A1 | | 2006 | 0126 | | WO 2 | 005- | EP53 | 301 | | 2 | 0050 | 711 |
| | | W: | AE, | AG, | AL, | AM, | AT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BW, | BY, | BZ, | CA, | CH, |
| | | | CN, | co, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | EG, | ES, | FI, | GB, | GD, |
| | | | GE, | GH, | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | KM. | KP, | KR. | KZ. |
| | | | LC, | LK, | LR, | LS. | LT. | LU, | LV. | MA. | MD. | MG. | MK. | MN. | MW. | MX. | MZ. | NA. |
| | | | | | | | | PG, | | | | | | | | | | |
| | | | | | | | | TN, | | | | | | | | | | |
| | | | | ZM, | | | | | | | | | | | | | | |
| | | RW: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE. | ES, | FI, | FR. | GB. | GR, | HU. | IE. |
| | | | | | | | | MC, | | | | | | | | | | |
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| | | | | | | RU, | | | | | | | | | | , | | |
| | EP | 1768 | 644 | | | A1 | | 2007 | 0404 | | EP 2 | 005- | 7668 | 00 | | 2 | 0050 | 711 |
| | | R: | AT, | BE, | BG, | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FI, | FR, | GB, | GR, | HU, | IE, |
| | | | 15, | IŤ, | LI, | LT, | LU, | LV, | MC, | NL, | PL, | PT. | RO, | SE, | SI. | SK, | TR | |
| | GB | 2417 | 683 | | | | | | | | | | | | | | | 713 |
| RIO | | | LN. | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 004 | 1050 | 24 | | | 0041 | |

WO 2005-EP53301

AB Disclosed is the use of an insol. or sparingly soluble micronized substance

class which is not a cosmetic UV absorber and which is dispersed in the oil- or water-phase of a cosmetic or dermatol. composition for the enhancement

of light protecting action of this cosmetic or dermatol. composition comprising

at least one cosmetic UV filter (e.g., triazines, benzenesulfonic acids) which is soluble in the water- or oil-phase. The cosmetic formulation according to the invention shows a remarkable increase in SPF. Thus, a formulation contained birefringent particle 40-60, electrolyte 0.1-10, water 30-60, and UV filter 0.1-20 parts.

If 682349-23-1

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (sunscreen cosmetic or dermatol. formulations)

RN 682349-23-1 CAPLUS

CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2,2-dimethyl-1,3-

L14 ANSWER 2 OF 5
ACCESSION NUMBER:
DOCUMENT NUMBER:
114:260055
COSMECTIC COMPOSITION CONTAINING TRIALIZATION CONTROL COMPOSITION CONTROL COMPOSIT

IP.com Journal (2004), 4(10), 26 (No. IP.COM000031257D), 20 Sep 2004 CODEN: IJPOBX; ISSN: 1533-0001

IP.com, Inc. Journal; Patent

PUBLISHER: DOCUMENT TYPE: LANGUAGE: PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|----------------------|---------|----------|----------------------------|-----------|
| | | | | |
| IP 31257D | | 2004092 | 0 | |
| IORITY APPLN. INFO.: | | | IP 2004-31257D | 20040920 |
| Disclosed is the us | e organ | ic UV fi | lters selected from 1,3,5- | triazines |
| | | | | |

are sym. by optionally substituted Ph and aryl radicals, preferably by Ph,
bisphenyl and terphenyl for the protection of human and animal hair and skin against the damaging effect of UV radiation. Most preferably 2,4,6-tris[1,1'-biphenyl]-4-yl-1,3,5-triazine (registry number: 31274-51-8)
is used as organic UV filter. The selected triazine derivs. are highly effective UV absorbers for cosmetic formulations.

IT 682349-23-1
RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses) (cosmetic composition containing triazine derivs.)

RN 682349-23-1 CAPLUS

RN 682349-23-1 CAPLUS (CA INDEX NAME)

L14 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN propanediyl ester (9CI) (CA INDEX NAME)

(Continued)

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

L14 · ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN
ACCESSION NUMBER: 2004:803835 CAPLUS
DOCUMENT NUMBER: 141:300991
TITLE: Symmetrical triazine derivatives as UV absorbers
INVENTOR(S): Ehlis, Thomas; Muller, Stefan; Hayoz, Pascal PATENT ASSIGNEE(S): SOURCE: Germany
U.S. Pat. Appl. Publ., 54 pp.
CODEN: USXXCO
Patent DOCUMENT TYPE: LANGUAGE: FAMILY ACC. NUM. COUNT: PATENT INFORMATION: English 1

| | rent : | | | | KIN | D | DATE | | | | ICAT | | | | D. | ATE | |
|-----------|--------|------|------|-----|-----|-----|------|------|-----|-------|-------|------|------|-----|-----|------|-----|
| | | | | | | - | | | | | | | | | - | | |
| | 2004 | | | | | | 2004 | 0930 | | US 2 | 2004- | 8046 | 76 | | 2 | 0040 | 319 |
| AU | 2004 | 2240 | 86 | | A1 | | 2004 | 1007 | | AU 2 | 2004- | 2240 | 86 | | 2 | 0040 | 319 |
| WO | 2004 | 0854 | 12 | | A2 | | 2004 | 1007 | | WO 2 | 004- | EP50 | 331 | | 2 | 0040 | 319 |
| WO | 2004 | 0854 | 12 | | A3 | | 2005 | 0210 | | - | | | | | _ | | |
| | | | | | | | | | | BB. | BG, | BR. | RΨ. | BY. | BZ. | CA. | CH. |
| | | CN. | CO. | CR. | CU. | CZ. | DE. | DK. | DM. | DZ. | EC, | FF | EG. | FS | FT, | GB, | GD, |
| | | GF. | GH. | GM. | HD, | HII | ID, | TT. | TN | TE | JP, | VE, | KC, | VD, | VD' | V2 | 10 |
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| | | TD, | TG | | | | | | | | | | | | | | |
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| | | IE. | SI. | LT. | LV. | FI. | RO. | MK. | CY. | AL. | TR, | BG. | CZ. | EE. | HU. | PI. | SK |
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R SOURCE(S): MARPAT 141:300991
The present invention relates to the use of specific sym. triazine OTHER SOURCE(S):

AB The present invention relates to the use of specific derivs.

for the protection of human and animal hair and skin against the damaging effect of UV radiation, cosmetic compns. comprising these triazine derivs., and process for the preparation of these compds. The compds.

used in micronized or soluble form. For example, cyanuric chloride (9.2

0.05 mol) was added to melted biphenyl (200.0 g, 1.28 mol) and hydrogen chloride was discharged for 10 min. Aluminum chloride (20.0 g, 0.15 mol) was added within 40 min in 5 equal portions, whereby hydrogen chloride

discharged again after the first two addns. After termination of the reaction 95% ethanol (200 mL) was added dropwise slowly. The reaction mixture was heated up for 1 h under reflux. Finally, acetone (400 mL)

added and agitated for 1 h, cooled down to room temperature and the

L14 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) product was filtered under suction. Yield of tris(biphenyl)-1,3,5-triszine was approx. 65%. Various cosmetic (sunscreen) formulations were prepd. using tris(biphenyl)-1,3,5-triazine and other triazine UV absorbers. 682349-23-1P ΙT

682349-23-1P RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (aym. triazine derivs. as UV absorbers for cosmetics) 682349-23-1 CAPLUS Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2,2-dimethyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

Described are aminohydroxybenzophenonecarboxamide derivs. of formula (I) [wherein R1, R2 = independently C1-20 alkyl, C2-20 alkenyl, C3-10 cycloalkyl, C3-10 C3-C10 cycloalkyl, C3-10 C3-C10 cycloalkenyl; or R1 and R2 together with the linking nitrogen atom form a 5- or 6-membered heterocyclic ring; n1 =

1-4;
 when n1 = 1, R3 = saturated or unsatd. heterocyclic radical,
hydroxy-C1-C5
 alkyl, cyclohexyl optionally substituted with one or more C1-5 alkyl, Ph
 optionally substituted with a heterocyclic radical, aminocarbonyl, C1-5
 alkylcarboxy; when n1 = 2, R3 = alkylene, cycloalkylene or alkenylene
 radical which is optionally substituted by a carbonyl or carboxy group;

R3 together with A forms a bivalent radical of the formula Q; wherein n2

1-3; when nl = 3, R3 = alkanetriyl radical; when nl = 4, R3 = alkanetetrayl radical; R = 0, N(R5); R5 = H, C1-5 alkyl, hydroxy-C1-5 alkyl]. These compds. are useful as UV filters in sunscreen applications, preferably for the protection of human and animal hairs and from the damage of UV radiation as well as cosmetic compns. comprising these compds. Thus, a solution of 10.6 g 3-diethylaminodibenzooxepin (preparation given) in 20 mL diethylene glycol di-Me ether was added to a suspension of

7.2 g 2-(4-aminophenyl)-6-methylbenzothiazole are suspended in 60 mL diethylene glycol di-Me ether at room temperature under stirring, heated

90°, and allowed to react for 4 h to give 7.3 g
N-[4-(6-methylbenzothiazol-2-yl)phenyl]-2-(4-diethylamino-2-hydroxybenzoyl)benzamide.

1T 682349-16-2P, 1,6-Bis[[2-[4-(diethylamino)-2-hydroxybenzoyl)benzoyl)benzoyl]oxy]-expanse 682349-22-0P,
1,4-Bis[[2-[4-(diethylamino]-2-hydroxybenzoyl]benzoyl]oxy]-2-butene
682349-23-1P, 1,3-Bis[[2-[4-(diethylamino]-2-hydroxybenzoyl]benzoyl]benzoyl]oxy]-2,2-dimethylpropane
RL: BUU (Biological use, unclassified); COS (Cosmetic use); SPN
(Synthetic
preparation); BIOL (Biological vs. variations)

thetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amino substituted hydroxyphenyl benzophenone derivs.

V
absorbers in sunscreen applications)
682349-16-2 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 1,6-hexanediyl (9CI) (CA INDEX NAME)

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN ACCESSION NUMBER: 2004:515467 CAPLUS DOCUMENT NUMBER: 141:71355

DOCUMENT NUMBER: TITLE:

141:71355
Preparation of amino substituted hydroxyphenyl benzophenone derivatives as UV absorbers Haase, Juerg; Ehlis, Thomas; Borsos, Elek; Mueller, Stefan Ciba Specialty Chemicals Holding Inc., Switz. PCT Int. Appl., 50 pp.
CODEN: PIXXD2
Patent English 1 INVENTOR (S):

PATENT ASSIGNEE(S):

DOCUMENT TYPE:

FAMILY ACC. NUM. COUNT:

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| | | | ES. | FI. | FR. | GB. | GR. | HU, | TE. | TT. | LIL | MC. | NT. | PT. | PO, | SF | 81 | er, |
| | | | TR. | BF. | BJ. | CF. | CG. | CI, | CM. | GA. | GN | GO, | GW, | MT. | MD, | NF. | SN, | TD |
| TG | | | •••• | | , | , | , | Ψ-, | ٠, | ٠., | ٠, | 02, | J., | , | , | , | 511, | , |
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| | | 1569 | | | | | | 2005 | | | | 2003- | | | | | | |
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| | | | TE. | SI. | LT. | LV. | FT. | RO, | MK. | 7 | nt. | מיד י | - | C7 | FP, | un | er, | F 1 , |
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OTHER SOURCE(S): MARPAT 141:71355

L14 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

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682349-22-0 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-butene-1,4-diylester (9CI) (CA INDEX NAME)

682349-23-1 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoy1]-, 2,2-dimethyl-1,3-propanedlyl ester (9CI) (CA INDEX NAME)

(Continued)

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS ON STN ACCESSION NUMBER: 2003:830446 CAPLUS DOCUMENT NUMBER: 140:362521

DOCUMENT NUMBER: TITLE: Preparation of amino substituted hydroxyphenyl benzophenone derivatives and their uses as UV filters in sunscreen formulations Anon.

AUTHOR(S): CORPORATE SOURCE:

Anon.
USA
IP.com Journal (2003), 3(8), 40 (No.

SOURCE: IPCOM000018721D)

, 4 Aug 2003 CODEN: IJPOBX; ISSN: 1533-0001 IP.com, Inc. Journal; Patent English

PUBLISHER: DOCUMENT TYPE: LANGUAGE:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| | | | | |
| IP 18721D . | | 20030804 | | |
| PRIORITY APPLN. INFO.: | • | | IP 2003-18721D | 20030804 |

Described are synthesis of amino substituted hydroxyphenyl benzophenone derivs. The compds. are useful as UV filters in sunscreen applications. For example, comound I synthesized by reacting anhydrous 4-diethylamio 2-hydroxy benzophenone carboxylic acid with 2,2-dimethyl-1,3-propanediol was found to be a good UV absorber and was incorporated into sunscreen formulations.
682349-24-2 682349-25-3 682349-26-4
682349-27-5 682349-28-6 682349-29-7
682349-30-0 682349-32-2 682349-33-3
682349-34-4
882. COS (Cosmetic use): BIOL (Biological study): USES (Hass)

RE: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
(preparation of amino substituted hydroxyphenyl benzophenone derivs.

and

their uses as UV filters in sunscreen formulations) 682349-24-2 CAPLUS . Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 1,2-ethanediyl

(9CI) (CA INDEX NAME)

682349-25-3 CAPLUS
Benzolc acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-,
-2,1-ethanediyl'
ester (9C1) (CA INDEX NAME)

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

RN 682349-26-4 CAPLUS
CN Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-,
(methylimino)di-2,1ethanediyl ester (9CI) (CA INDEX NAME)

ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued) 682349-27-5 CAPLUS
Benzolc acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 3-[3-[[2-[4-(diethylamino)-2-hydroxybenzoyl]oxy]-2,2-dimethyl-1-oxopropoxy]-2,2-dimethylpropyl ester (9CI) (CA INDEX NAME)

68239-28-6 CAPLUS BOARD CAPLUS

682349-29-7 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-[[[2-[4-(diethylamino)-2-hydroxybenzoyl]oxy]methyl]-2-ethyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

682349-30-0 CAPLUS

Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2,2-bis[[{2-[4-(diethylamino)-2-hydroxybenzoyl]benzoyl]benzoyl]benzoyl]benzoyl]benzoyl]benzoyl]cxy]methyl]-1,3-propanediyl ester [SCI) (CA INDEX NAME)

PAGE 1-A

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

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PAGE 2-A

NEt2

682349-32-2 CAPLUS Benzolc acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, ethylidene ester (9C1) (CA INDEX NAME)

682349-33-3 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 1,3-propanediyl ester [9CI) (CA INDEX NAME)

682349-34-4 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-butyne-1,4-diyl
ester (9CI) (CA INDEX NAME)

L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

682349-23-1 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2,2-dimethyl-1,3-propanediyl ester (9CI) (CA INDEX NAME)

. L14 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN

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682349-16-2P 682349-22-0P 682349-23-1P RL: COS (Cosmetic use); SPM (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of amino substituted hydroxyphenyl benzophenone derivs.

their uses as UV filters in sunscreen formulations)
682349-16-2 CAPLUS
Benzoic acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 1,6-hexanediyl

(9CI) (CA INDEX NAME)

682349-22-0 CAPLUS
Benzolc acid, 2-[4-(diethylamino)-2-hydroxybenzoyl]-, 2-butene-1,4-diyl
ester (9C1) (CA INDEX NAME)